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DATA FROM THE COMMERCIAL FISHERY FOR LAKE WHITEFISH,  
Coregonus clupeaformis (Mitchill), ON GREAT SLAVE LAKE,  
NORTHWEST TERRITORIES, 1983 and 1984

by

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## ABSTRACT

Low. G., and C.J. Read. 1987. Data from the commercial fishery for lake whitefish, Coregonus clupeaformis (Mitchill), on Great Slave Lake, Northwest Territories, 1983 and 1984. Can. Data Rep. Fish. Aquat. Sci. 641: v + 38 p.

Data from the fish plant sampling and fishery observations on the Great Slave Lake commercial fishery, summer and winter, are presented. Production and catch per unit of effort by vessel type at weekly intervals by fishing area are shown. A total of 3 909 lake whitefish were sampled for age, length and weight. From the winter fishery observations, 17 outfits lifting 89 nets (8 099 m), were observed for catch, effort and cullage.

Key words: catch composition; catch/effort; commercial fishing; cullage; exploitation; fishery management; monitoring.

## RÉSUMÉ

Low. G., and C.J. Read. 1987. Data from the commercial fishery for lake whitefish, Coregonus clupeaformis (Mitchill), on Great Slave Lake, Northwest Territories, 1983 and 1984. Can. Data Rep. Fish. Aquat. Sci. 641: v + 38 p.

Le rapport présente des données sur l'échantillonnage à l'usine de transformation et sur les observations des pêches commerciales d'été et d'hiver dans le Grand lac des Esclaves. On y donne les chiffres de production et des prises par unité d'effort selon le type de bateau et la zone de pêche pour chaque semaine. Les données sur l'âge, la longueur et le poids ont été recueillies à partir d'un échantillon de 3 909 corégones. Quant à la pêche d'hiver, les observations ont été faites auprès de 17 entreprises qui ont utilisé 89 filets (8 099 m) et portaient sur les prises, l'effort et les rejets.

Mots-clés: composition des prises; prises/effort; pêche commerciale; rejets; exploitation; gestion des pêches; contrôle.



## INTRODUCTION

Commercial fishing first began on Great Slave Lake in 1945. Since then the fishery has been monitored annually for total catch; however, few studies were conducted on the effects of exploitation on the stocks of the commercial species (Rawson 1951, 1953a; Keleher 1972; Kennedy 1956) until the 1970's.

In 1971, the Department of Fisheries began a long term stock assessment and monitoring program designed to collect information considered essential for the sound management of the Great Slave Lake commercial fishery. These programs are consistent with the recommendations of the Great Slave Lake Working Party (1969) outlined in Roberge et al. (1982).

In order to meet these objectives, a three-component field study was implemented including fish plant sampling, fishery observations and experimental gillnetting. Results of this work for the years 1972 to 1981 have been described by Bond (1974a, b, 1975a, b), Bond and Turnbull (1973), Moshenko et al. (1978, 1981), Moshenko and Low (1978a, b, 1979, 1980) and Roberge et al. (1982, 1984).

Two components, fish plant sampling and winter fishery observations, were carried out during 1983 and 1984. This report summarizes, in tabular form the data gathered from each of these two components.

## STUDY AREA

Great Slave Lake lies in the southwest corner of the District of Mackenzie, Northwest Territories (Fig. 1). It is the fifth largest lake in North America, having a surface area of 27 195 km<sup>2</sup> and a drainage area of 985 300 km<sup>2</sup>. Stretching 440 km from its extreme east end to the outlet of the Mackenzie River, the lake straddles two physiographic regions. The northeast shore of the north arm and the east arm lie within the Precambrian Shield and have irregular, precipitous margins. The western portion of the lake overlies the alluvial plain known as the Mackenzie Lowlands and has few islands and gently sloping shores. The rivers entering the lake from the shield are cold, clear and rapidly flowing while those entering from the south are slow flowing brown water streams laden with silt during spring and early summer. While the western basin has a maximum depth of approximately 165 m and a mean depth of 42 m, a depth of 625 m has been recorded in the east arm (Rawson 1950). Physical and biological characteristics of the lake have been described in detail by Rawson (1950, 1951, 1953a, b).

## DESCRIPTION OF THE FISHERY

Great Slave Lake has been fished commercially since 1945. During the 1950's annual production of whitefish and trout averaged 2.9 million kg as the large accumulated stock was

exploited. Since the 1950's commercial production of both species has decreased annually and whitefish and trout have reacted differently to exploitation (Keleher 1972). The west end of the lake is now being managed for whitefish production with minimal regard to lake trout, the latter being unable to withstand commercial gillnetting. Gillnets have been the sole means of exploitation by the commercial fishery since its inception. The legal minimum mesh size was 139 mm stretched mesh until regulation changes in 1977 allowed the use of 133 mm mesh as the legal minimum mesh size. There has been no restriction on the number of nets a fisherman may use since 1961. Almost the entire lake has been open to commercial fishing at some point in the history of the fishery, although certain areas have been closed to protect subsistence and sport fisheries (Fig. 1 and Northwest Territories Fishery Regulations 1985). The east arm of Great Slave Lake (Area VI) was completely closed to commercial fishing in 1974 and is being managed exclusively for subsistence and sport fishing (Moshenko and Gillman 1978).

There are at least 25 fish species in the lake (Keleher 1972) of which only five are of commercial importance. The major commercial species in decreasing order of importance are: lake whitefish, *Coregonus clupeaformis* (Mitchill); lake trout, *Salvelinus namaycush* (Walbaum); inconnu, *Stenodus leucichthys* *nelma* (Pallas); northern pike, *Esox lucius* (Linnaeus); and walleye (pickerel), *Stizostedion vitreum* (Mitchill). Cisco, *Coregonus* spp., burbot, *Lota lota* (Linnaeus) and Tongnose sucker, *Catostomus catostomus* (Forster) may constitute up to 40% or more of the total catch; however, they are culled on the lake due to lack of market demand.

The lake is divided into six administrative areas for management purposes and a portion of the total annual quota of 1 681 900 kg round weight of whitefish and trout is allotted to each area (Table 1). The annual quota is based on the period commencing 1 November and terminating on the following 31 October and applies to the combined catch for both the winter and summer fisheries. More detailed histories of the commercial fishery on Great Slave Lake are given by Kennedy (1956), Keleher (1972) and Bond and Turnbull (1973). The description of the winter and summer fisheries is summarized by Moshenko et al. (1978).

## MATERIALS AND METHODS

### FISH PLANT SAMPLING

Monthly summaries of the landings by species by administrative area were compiled from the Freshwater Fish Marketing Corporation (FFMC) sales slips by Department of Fisheries and Oceans (DFO) staff in Hay River.

The following table lists the factors used to convert various species and forms to round weight:

| Species   | Form             | Conversion Factor |
|-----------|------------------|-------------------|
| Whitefish | dressed          | x 1.17            |
|           | dressed          | x 1.22            |
| Pickerel  | headless dressed | x 1.39            |
|           | dressed          | x 1.21            |
| Trout     | headless dressed | x 1.53            |
|           | dressed          | x 1.22            |
| Pike      | headless dressed | x 1.53            |
|           | dressed          | x 1.16            |
| Inconnu   | headless dressed | x 1.35            |
|           | dressed          |                   |

Production values presented in this report (Tables 2-6) include whitefish culled at the plant but do not include an estimate of deteriorated whitefish discarded on the lake. Fishermen cull these fish as the nets are lifted but no record is made of the numbers or estimated weight. Fish which do not meet the market size and quality requirements are further culled by graders at the fish plant and the weight is recorded on the sales slip. Cullage on the lake was not subtracted from the quota during the 1983 and 1984 seasons.

Commercial landings of whitefish were sampled from each of the six administrative areas fished during the sample periods. Sampling frequency was based on a schedule as follows:

Winter - December 1 to March 30

Summer - June 10 to July 15

Fall - September 1 to October 15

Boxes of fish were selected at random from the catches of various fishermen as they arrived at the plant. All whitefish in the box, up to a maximum of 70 fish per individual fisherman were sampled. Thus, the sample of 200 whitefish should have been taken from at least three different fishermen. An additional 10 fish were sampled to compensate for scale samples which were unsuitable for aging. The fish were measured for fork length ( $\pm 1$  mm) and dressed weight ( $\pm 50$  g). Scales were taken from the left side of the fish from the area just above the lateral line and below the dorsal fin.

#### CATCH PER UNIT OF EFFORT (CPUE)

Number of vessel deliveries and whitefish landings (production in kilograms round weight) by weekly intervals for each administrative area (Tables 11-12) as well as total whitefish production, estimates for total numbers of nets used and CPUE (kilograms round weight/91 m/24 h) by weekly intervals (Tables 13-26) were calculated as described by Moshenko et al. (1978, 1981) and Moshenko and Low (1979, 1980).

#### WINTER FISHERY OBSERVATIONS

Winter fishery observations were conducted in 1983 and 1984 by DFO Fishery Officers during their regular snowmobile patrols on Great Slave Lake. Observations were recorded whenever fishermen were encountered lifting gillnets on the lake. Due to the encounter approach the fisher-

man's entire daily lift was not observed. Data collected represent a sub-sample of the fisherman's lift.

The number of each species caught and culled per net was recorded as the nets were being lifted. The fishermen were then interviewed for information pertaining to the number of nets set, location and duration of the net-gang sets, mesh size, mesh depth, twine size, depth fished, type of vehicle and size of crew.

Observations were conducted from December to March of each season in Areas IE and IV (Fig. 1). The observation program was limited to areas which were close to Hay River and were patrolled frequently. Areas IE and IV contributed 75% of winter whitefish production during the 1983 and 1984 winter seasons (Tables 5 and 6).

#### BIOLOGICAL DATA

The scale age of whitefish was determined by counting the number of completed annuli. That is, an age 10 fish was in its eleventh year.

Annual mortality rates (natural and fishing) were calculated using the method (all ages known) outlined by Robson and Chapman (1961). The total annual mortality is defined as the number of fish which die during a year, divided by the initial number (Ricker 1975). The right hand descending portion of a catch curve may be used to estimate annual mortality rates if the following assumptions can be met:

- i) constant survival or mortality rates over the range of age classes, and with time;
- ii) constant year class strength (even recruitment); and
- iii) all fish beyond some age are equally vulnerable to the harvesting gear.

Ricker (1975) indicated that the modal age in the catch curve will commonly lie quite close to the first year in which recruitment can be considered effectively complete. Recruitment is defined as the addition of new fish to the vulnerable population by growth among small size categories. In our calculations, we first selected the modal age class and then chose the next older age class to be sure that all fish beyond this age are at the age of effectively complete recruitment and fully susceptible to the gear.

Data were analyzed using an Amdahl 5850 computer (University of Manitoba). The Statistical Analysis System (1982) was used to generate the length and age tables. A Hewlett Packard (model 9810A) programmable calculator was used to generate the survival rates.

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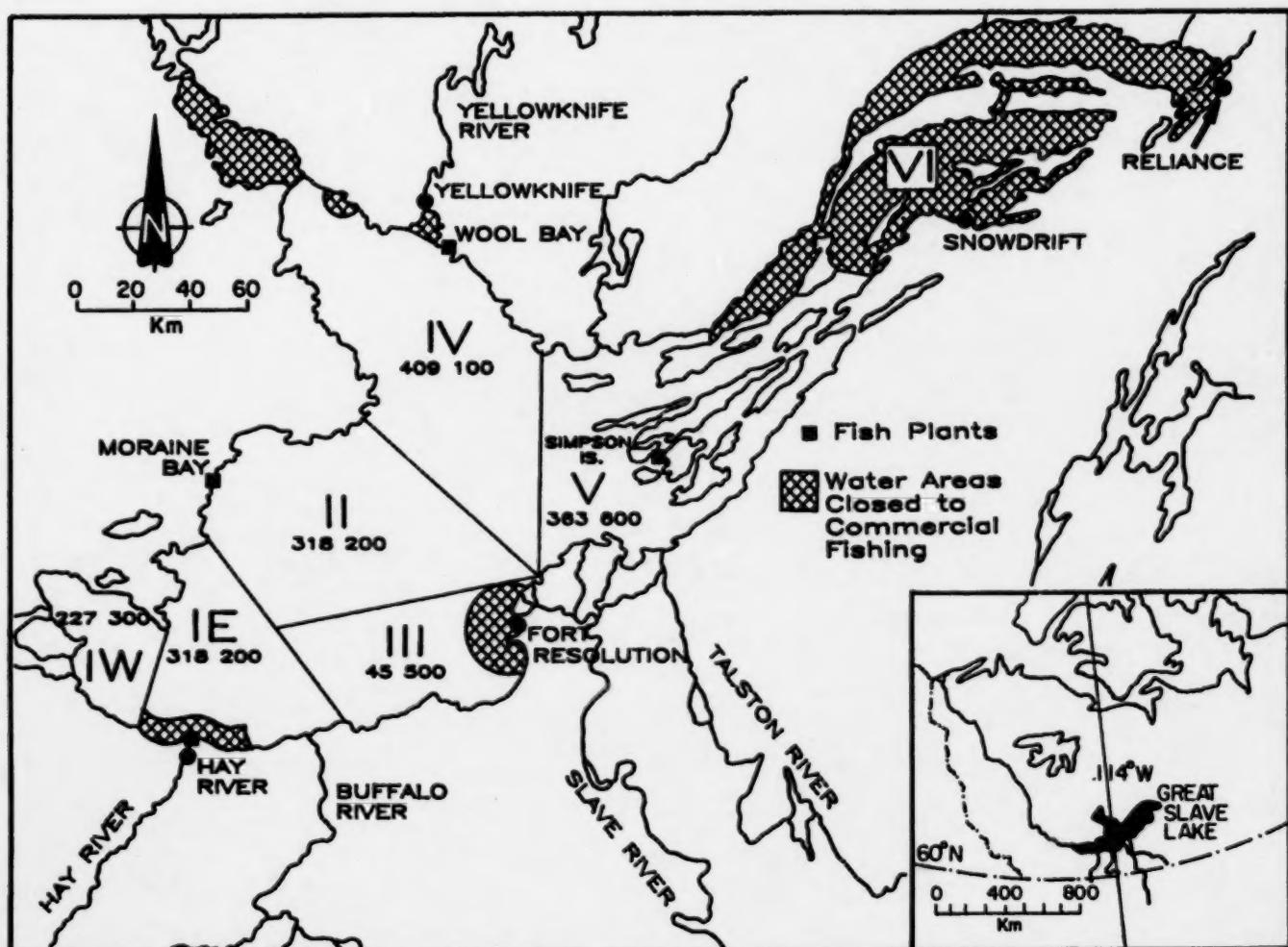


Fig. 1. Map of Great Slave Lake showing the administrative areas and quotas, areas closed to commercial fishing and the location of fish plants.

Table 1. Commercial quotas in effect on Great Slave Lake during the 1976 to 1984 seasons.

| Administrative Area | Commercial Quota of Whitefish and Trout <sup>1</sup><br>(kg round weight) |                    |                  |                  |                  |                  |                    |
|---------------------|---|--------------------|------------------|------------------|------------------|------------------|--------------------|
|                     | 1975-76   | 1976-77<br>1977-78 | 1978-79          | 1979-80          | 1980-81          | 1981-82          | 1982-83<br>1983-84 |
| IW                  | 227 273   | 227 273            | 227 273          | 227 273          | 227 300          | 227 300          | 227 300            |
| IE                  | 318 181   | 318 181            | 318 181          | 318 181          | 318 200          | 318 200          | 318 200            |
| II                  | 681 819   | 318 181            | 318 181          | 318 181          | 318 200          | 318 200          | 318 200            |
| III                 | Nil   | Nil                | 45 455           | 45 455           | 45 500           | 79 500           | 45 500             |
| IV                  | 622 727   | 409 091            | 409 091          | 409 091          | 409 100          | 409 100          | 409 100            |
| V                   | 325 000   | 272 729            | 295 455          | 363 637          | 363 600          | 363 600          | 363 600            |
| <b>Total</b>        | <b>2 175 000</b>  | <b>1 545 455</b>   | <b>1 613 636</b> | <b>1 681 818</b> | <b>1 681 900</b> | <b>1 715 900</b> | <b>1 681 900</b>   |

<sup>1</sup> Season runs from November 1 of one year to October 31 of the next.

Table 2. Annual production of commercial species for Great Slave Lake, 1973 to 1984 (x 1000 kg, round weight).

| Year <sup>1</sup> | Whitefish | Trout | Pike | Inconnu | Walleye | Total             |             |
|-------------------|-----------|-------|------|---------|---------|-------------------|-------------|
|                   |           |       |      |         |         | Whitefish & Trout | All Species |
| 1972-73           | 1 004     | 92    | 155  | 103     | 17      | 1 096             | 1 371       |
| 1973-74           | 973       | 111   | -    | -       | -       | 1 084             | 1 084       |
| 1974-75           | 921       | 99    | 96   | 95      | 10      | 1 020             | 1 221       |
| 1975-76           | 975       | 83    | 103  | 77      | 9       | 1 058             | 1 247       |
| 1976-77           | 1 172     | 108   | 118  | 86      | 11      | 1 280             | 1 495       |
| 1977-78           | 1 107     | 105   | 157  | 153     | 13      | 1 212             | 1 535       |
| 1978-79           | 1 065     | 121   | 129  | 153     | 6       | 1 186             | 1 474       |
| 1979-80           | 1 178     | 122   | 199  | 65      | 19      | 1 300             | 1 583       |
| 1980-81           | 1 097     | 85    | 151  | 43      | 4       | 1 182             | 1 380       |
| 1981-82           | 1 139     | 75    | 166  | 23      | 8       | 1 214             | 1 411       |
| 1982-83           | 899       | 61    | 115  | 16      | 5       | 960               | 1 096       |
| 1983-84           | 863       | 50    | 108  | 47      | 15      | 913               | 1 083       |

<sup>1</sup> Season runs from November 1 of one year to October 31 of the next.

Table 3. Total production of commercial species (kg round weight) by administrative area, November 1, 1982 to October 31, 1983.

| Species   | Production from each administrative area |         |         |        |         |         | Total     |
|-----------|--|---------|---------|--------|---------|---------|-----------|
|           | IW                                       | IE      | II      | III    | IV      | V       |           |
| Whitefish | 221 149                                  | 113 226 | 158 957 | 21 987 | 257 323 | 125 882 | 898 524   |
| Trout     | 767                                      | 1 022   | 1 589   | 28     | 3 779   | 54 048  | 61 233    |
| Pike      | 49 262                                   | 14 294  | 10 721  | 1 564  | 16 306  | 22 760  | 114 907   |
| Inconnu   | 2 451                                    | 4 446   | 546     | 2 837  | 2 381   | 3 430   | 16 091    |
| Walleye   | 543                                      | 249     | 52      | 85     | 1 123   | 2 859   | 4 911     |
| Total     | 274 172                                  | 133 237 | 171 865 | 26 501 | 280 912 | 208 979 | 1 095 666 |

Table 4. Total production of commercial species (kg round weight) by administrative area, November 1, 1983 to October 31, 1984.

| Species   | Production from each administrative area |         |         |        |         |         | Total     |
|-----------|--|---------|---------|--------|---------|---------|-----------|
|           | IW                                       | IE      | II      | III    | IV      | V       |           |
| Whitefish | 227 916                                  | 110 949 | 195 007 | 22 144 | 198 312 | 108 756 | 863 084   |
| Trout     | 3 357                                    | 2 591   | 2 846   | 18     | 1 189   | 40 154  | 50 155    |
| Pike      | 35 413                                   | 9 437   | 13 392  | 1 470  | 22 883  | 21 980  | 104 575   |
| Inconnu   | 5 431                                    | 24 788  | 516     | 7 019  | 2 154   | 7 102   | 47 010    |
| Walleye   | 839                                      | 2 057   | 88      | 3 975  | 2 388   | 5 920   | 15 267    |
| Total     | 272 956                                  | 149 822 | 211 849 | 34 626 | 226 926 | 183 912 | 1 080 091 |

Table 5. Production of whitefish and trout (kg round weight) from each administrative area for the winter season, 1982-83 and the summer season, 1983.

| Administrative Area | Winter    |       | Summer    |        | Total     |        | Total   |
|---------------------|-----------|-------|-----------|--------|-----------|--------|---------|
|                     | Whitefish | Trout | Whitefish | Trout  | Whitefish | Trout  |         |
| IW                  | 159 277   | 237   | 61 872    | 530    | 221 149   | 767    | 221 916 |
| IE                  | 61 956    | 61    | 51 270    | 961    | 113 226   | 1 022  | 114 248 |
| II                  | 5 861     | 18    | 153 096   | 1 571  | 158 957   | 1 589  | 160 546 |
| III                 | Ni1       | Ni1   | 21 987    | 28     | 21 987    | 28     | 22 015  |
| IV                  | 71 274    | 99    | 186 049   | 3 680  | 257 323   | 3 779  | 261 102 |
| V                   | Ni1       | Ni1   | 125 882   | 54 048 | 125 882   | 54 048 | 179 930 |
| Total               | 298 368   | 415   | 600 156   | 60 818 | 898 524   | 61 233 | 959 757 |

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Table 6. Production of whitefish and trout (kg round weight) from each administrative area for the winter season, 1983-84 and the summer season, 1984.

| Administrative Area | Winter    |       | Summer    |        | Total     |        | Total   |
|---------------------|-----------|-------|-----------|--------|-----------|--------|---------|
|                     | Whitefish | Trout | Whitefish | Trout  | Whitefish | Trout  |         |
| IW                  | 126 549   | 1 289 | 101 367   | 2 068  | 227 916   | 3 357  | 231 273 |
| IE                  | 35 676    | 635   | 75 273    | 1 956  | 110 949   | 2 591  | 113 540 |
| II                  | 54 459    | 319   | 140 548   | 2 527  | 195 007   | 2 846  | 197 853 |
| III                 | Ni1       | Ni1   | 22 144    | 18     | 22 144    | 18     | 22 162  |
| IV                  | Ni1       | Ni1   | 198 312   | 1 189  | 198 312   | 1 189  | 199 501 |
| V                   | Ni1       | Ni1   | 108 756   | 40 154 | 108 756   | 40 154 | 148 910 |
| Total               | 216 684   | 2 243 | 646 400   | 47 912 | 863 084   | 50 155 | 913 239 |

Table 7. Winter and summer prices (¢/kg) for the commercial fish species, basis loose fresh fish, F.O.B. Hay River Plant, from Great Slave Lake, NWT for winter 1982-83 and summer 1983.

| Species and Form              | Winter 1982-83 <sup>1</sup> |         |         | Summer 1983 <sup>2</sup> |                   | Total |
|-------------------------------|-----------------------------|---------|---------|--------------------------|-------------------|-------|
|                               | Dec. 17                     | Feb. 20 | Mar. 13 | FFMC <sup>3</sup>        | GNWT <sup>4</sup> |       |
| <b>Whitefish (dressed)</b>    |                             |         |         |                          |                   |       |
| large smokers                 | -                           | -       | -       | 71                       | 19                | 90    |
| medium smokers                | -                           | -       | -       | 71                       | 19                | 90    |
| jumbo (1.8 kg)                | 133                         | 143     | 165     | 65                       | 29                | 94    |
| large (1.4-1.8 kg)            | 122                         | 133     | 155     | 63                       | 26                | 89    |
| medium (0.7-1.4 kg)           | 111                         | 122     | 144     | 60                       | 28                | 88    |
| small (0.45-0.7 kg)           | 89                          | 100     | 122     | 34                       | 16                | 50    |
| <b>Lake Trout</b>             |                             |         |         |                          |                   |       |
| dressed - medium (1.8-3.6 kg) | 122                         | 122     | 122     | 100                      | 11                | 111   |
| - small (0.9-1.8 kg)          | 89                          | 89      | 89      | 78                       | 11                | 89    |
| headless dressed (3.6 kg)     | 133                         | 133     | 133     | 100                      | 11                | 111   |
| <b>Pickerel</b>               |                             |         |         |                          |                   |       |
| round - large                 | 133                         | 166     | 188     | 102                      | 0                 | 102   |
| - medium                      | 133                         | 166     | 188     | 113                      | 0                 | 113   |
| - small                       | 122                         | 155     | 177     | 102                      | 0                 | 102   |
| headless dressed - large      | 199                         | 199     | 199     | 157                      | 0                 | 157   |
| - medium                      | 199                         | 199     | 199     | 173                      | 0                 | 173   |
| - small                       | 188                         | 188     | 188     | 157                      | 0                 | 157   |
| <b>Northern pike</b>          |                             |         |         |                          |                   |       |
| head-on dressed (1.8-4.1 kg)  | 81                          | 81      | 81      | 63                       | 15                | 78    |
| headless dressed              | 42                          | 42      | 42      | 32                       | 8                 | 40    |
| <b>Inconnu</b>                |                             |         |         |                          |                   |       |
| headless dressed              | 125                         | 125     | 125     | 122                      | 0                 | 122   |

<sup>1</sup> 30% of the price was deducted for fish delivered frozen.

<sup>2</sup> A freight charge of 6.6¢/kg was deducted for fish delivered to the Moraine Bay, Wool Bay and Simpson Islands fish stations. The Government of the Northwest Territories (GNWT) subsidized freight costs on Great Slave Lake in order to keep the fishermens' freight costs at this level.

<sup>3</sup> Freshwater Fish Marketing Corporation prices.

<sup>4</sup> GNWT subsidized fish prices in the summer of 1983 as listed.

NOTE: Final payments to fishermen were not made in 1983.

Table 8. Winter and summer prices (¢/kg) for the commercial fish species, basis loose fresh fish, F.O.B. Hay River Plant, from Great Slave Lake, NWT for winter 1983-84 and summer 1984.

| Species and Form              | Winter 1983-84 <sup>1</sup> |         |         | Summer 1984 <sup>2</sup> |                   | Total |
|-------------------------------|-----------------------------|---------|---------|--------------------------|-------------------|-------|
|                               | Nov. 2                      | Feb. 17 | Mar. 17 | FFMC <sup>3</sup>        | GNWT <sup>4</sup> |       |
| Whitefish (dressed)           |                             |         |         |                          |                   |       |
| large smokers                 | -                           | -       | -       | 69                       | 29                | 98    |
| medium smokers                | -                           | -       | -       | 67                       | 29                | 96    |
| jumbo (1.8 kg)                | 111                         | 166     | 188     | 69                       | 35                | 104   |
| large (1.4-1.8 kg)            | 100                         | 155     | 177     | 67                       | 35                | 102   |
| medium (0.7-1.4 kg)           | 89                          | 144     | 166     | 65                       | 35                | 100   |
| small (0.45-0.7 kg)           | 67                          | 100     | 111     | 34                       | 22                | 56    |
| Lake Trout                    |                             |         |         |                          |                   |       |
| dressed - medium (1.8-3.6 kg) | 133                         | 177     | 177     | 140                      | 0                 | 140   |
| - small (0.9-1.8 kg)          | 100                         | 155     | 155     | 118                      | 0                 | 118   |
| headless dressed (3.6 kg)     | 144                         | 166     | 166     | 129                      | 0                 | 129   |
| Pickerel                      |                             |         |         |                          |                   |       |
| round - large                 | 133                         | 177     | 199     | 133                      | 0                 | 133   |
| - medium                      | 155                         | 266     | 288     | 155                      | 0                 | 155   |
| - small                       | 133                         | 177     | 199     | 133                      | 0                 | 133   |
| headless dressed - large      | 160                         | 160     | 160     | 160                      | 0                 | 160   |
| - medium                      | 186                         | 184     | 184     | 184                      | 0                 | 184   |
| - small                       | 160                         | 160     | 160     | 160                      | 0                 | 160   |
| Northern pike                 |                             |         |         |                          |                   |       |
| head-on dressed (0.35-1.8 kg) | 47                          | 47      | 47      | -                        | -                 | -     |
| (1.8-4.1 kg)                  | 81                          | 81      | 81      | 63                       | 0                 | 63    |
| headless dressed              | 47                          | 47      | 47      | 32                       | 0                 | 32    |
| Inconnu                       |                             |         |         |                          |                   |       |
| headless dressed              | 144                         | 199     | 199     | 144                      | 0                 | 144   |

<sup>1</sup> GNWT subsidy - winter was 10.5¢/kg for medium dressed whitefish. 30% of above listed prices was deducted for fish delivered frozen.

<sup>2</sup> A freight charge of 6.6¢/kg was deducted for fish delivered to the Moraine Bay, Wool Bay and Simpson Islands fish stations. The Government of the N.W.T. subsidized freight costs on Great Slave Lake to keep the fishermens' freight costs at this level.

<sup>3</sup> Freshwater Fish Marketing Corporation prices.

<sup>4</sup> GNWT subsidized fish prices in the summer of 1984 as listed.

NOTE: In addition, final payments were provided to and received by fishermen in November 1984 for the fish produced during the 1983/84 fiscal year as follows: whitefish 9.0¢/kg, lake trout 77¢/kg, pickerel (round) 91¢/kg, dressed 107¢/kg, northern pike 35¢/kg and inconnu 110¢/kg.

Table 9. Information on vehicle and vessel observations, number of persons and number of nets used in the Great Slave Lake commercial fishery, winter 1982-83 and summer 1983.

| WINTER FISHERY <sup>1</sup> (November - May) |                         |                     |                           |                   |                         |                      |
|--|-------------------------|---------------------|---------------------------|-------------------|-------------------------|----------------------|
| Licence Class <sup>2</sup>                   | Max. Licences Available | No. Licences Issued | No. of Vehicles Producing | Total No. Persons | No. Persons Per Vehicle | No. Nets Per Vehicle |
| A  | 32                      | 13                  | 10                        | 25                | 2.5                     | 30                   |
| B  | 30                      | 9                   | 6                         | 8                 | 1.3                     | 15                   |
| Total  | 62                      | 22                  | 16                        | 33                |                         |                      |

SUMMER FISHERY (June - October)

| Licence Class <sup>3</sup> | Max. Licences Available | No. Licences Issued <sup>1</sup> | No. of Vessels Producing <sup>1</sup> | Total No. Persons <sup>4</sup> | No. Persons Per Vessel <sup>4</sup> | No. Nets Per Vessel <sup>4</sup> |
|----------------------------|-------------------------|----------------------------------|---------------------------------------|--------------------------------|-------------------------------------|----------------------------------|
| A                          | 28                      | 22                               | 19                                    | 82                             | 4.3                                 | 71                               |
| B                          | 80                      | 43                               | 23                                    | 53                             | 2.3                                 | 24                               |
| Total                      | 108                     | 65                               | 42                                    | 135                            |                                     |                                  |

<sup>1</sup> Information obtained from Field Services records, Hay River.

<sup>2</sup> Licence Class A includes bombardiers; licence Class B includes skidoos.

<sup>3</sup> Licence Class A includes whitefish boats and bowpickers; licence Class B includes skiffs.

<sup>4</sup> Information based on the 1982 fishery observation records.

Table 10. Information on vehicle and vessel observations, number of persons and number of nets used in the Great Slave Lake commercial fishery, winter 1983-84 and summer 1984.

WINTER FISHERY<sup>1</sup> (November - May)

| Licence Class <sup>2</sup> | Max. Licences Available | No. Licences Issued | No. of Vehicles Producing | Total No. Persons | No. Persons Per Vehicle | No. Nets Per Vehicle |
|----------------------------|-------------------------|---------------------|---------------------------|-------------------|-------------------------|----------------------|
| A                          | 32                      | 20                  | 17                        | 42                | 2.5                     | 30                   |
| B                          | 30                      | 10                  | 6                         | 8                 | 1.3                     | 15                   |
| Total                      | 62                      | 30                  | 23                        | 50                |                         |                      |

SUMMER FISHERY (June - October)

| Licence Class | Max. Licences Available | No. Licences Issued <sup>1</sup> | No. of Vessels Producing | Total No. Persons <sup>4</sup> | No. Persons Per Vessel <sup>4</sup> | No. Nets Per Vessel <sup>4</sup> |
|---------------|-------------------------|----------------------------------|--------------------------|--------------------------------|-------------------------------------|----------------------------------|
| A             | 28                      | 23                               | 18                       | 82                             | 4.3                                 | 71                               |
| B             | 80                      | 59                               | 36                       | 53                             | 2.3                                 | 24                               |
| Total         | 108                     | 82                               | 54                       | 135                            |                                     |                                  |

<sup>1</sup> Information obtained from Field Services records, Hay River.

<sup>2</sup> Licence Class A includes bombardiers; Licence Class B includes skidoos.

<sup>3</sup> Licence Class A includes whitefish boats and bowpickers; Licence Class B includes skiffs.

<sup>4</sup> Information based on the 1982 fishery observation records.

Table II. Number of vessel deliveries and whitefish landings (kg round weight) by weekly interval for each administrative area, summer season 1983.

| Week Ending | June  |        |        |        |        | July   |        |        |        |        | August |        |        |        |        | September |        |        |       |     | October |    |    |     |        | Total   |         |
|-------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|-------|-----|---------|----|----|-----|--------|---------|---------|
|             | 26    | 3      | 10     | 17     | 24     | 31     | 7      | 14     | 21     | 28     | 4      | 11     | 18     | 25     | 2      | 9         | 16     | 23     |       | 2   | 9       | 16 | 23 |     |        |         |         |
| Area I-E    |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |       |     |         |    |    |     |        |         |         |
| Class A     | 2     | 3      | 5      | 0      | 6      | 6      | 6      | 4      | 4      | 4      | 4      | 1      | 6      | 1      | 2      | 2         | 5      | 3      | 5     | 1   | 2       | 2  | 5  | 4   | 50     |         |         |
| Class B     | 5     | 9      | 2      | 6      | 5      | 5      | 1      | 0      | 1      | 5      | 6      | 3      | 5      | 7      | 3      | 2         | 10     | 6      | 76    |     |         |    |    |     |        |         |         |
| Production  | 1 353 | 1 473  | 7 025  | 1 002  | 4 794  |        | 6 979  | 2 273  | 3 680  | 3 177  |        | 2 723  | 358    | 1 669  | 1 146  | 967       | 1 549  | 7 896  | 3 206 |     | 51 270  |    |    |     |        |         |         |
| Area IV     |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |       |     |         |    |    |     |        |         |         |
| Class A     | 2     | 15     | 12     | 6      | 2      | 0      | 0      | 1      | 2      | 2      | 4      | 3      | 3      | 3      | 0      | 0         | 0      | 0      |       |     |         |    |    |     | 52     |         |         |
| Class B     | 2     | 6      | 3      | 5      | 5      | 4      | 6      | 6      | 2      | 5      | 0      | 0      | 0      | 0      | 0      | 0         | 0      | 0      |       |     |         |    |    |     | 44     |         |         |
| Production  | 1 751 | 8 029  | 11 430 | 10 665 | 3 171  | 3 436  | 3 377  | 6 530  | 1 932  | 2 658  |        | 3 988  | 2 274  | 2 631  |        |           |        |        |       |     |         |    |    |     | 61 872 |         |         |
| Area II     |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |       |     |         |    |    |     |        |         |         |
| Class A     |       |        |        |        |        |        | 7      | 9      | 18     | 19     | 26     | 27     | 27     | 20     | 23     | 9         | 17     |        |       |     |         |    |    |     | 202    |         |         |
| Class B     |       |        |        |        |        |        | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0         | 0      | 0      |       |     |         |    |    |     | 0      |         |         |
| Production  |       |        |        |        |        |        | 1 404  | 4 060  | 6 940  | 13 466 | 20 721 | 35 479 | 26 729 | 9 141  | 16 267 | 1 465     | 14 824 |        |       |     |         |    |    |     |        | 153 096 |         |
| Area III    |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |       |     |         |    |    |     |        |         |         |
| Class A     | 0     | 1      | 2      | 1      | 4      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0      | 0         | 0      | 0      | 0     | 0   | 0       | 0  | 0  | 0   | 8      |         |         |
| Class B     | 2     | 2      | 3      | 2      | 4      | 4      | 7      | 5      | 5      | 7      | 4      | 4      | 4      | 1      | 4      | 4         | 4      | 1      | 4     | 5   | 4       | 5  | 4  | 5   | 63     |         |         |
| Production  | 462   | 1 471  | 3 136  | 896    | 4 248  | 1 369  | 1 764  | 701    | 932    | 1 761  |        | 794    | 792    | 762    | 179    |           |        |        |       | 946 | 1 774   |    |    |     | 21 987 |         |         |
| Area IV     |       |        |        |        |        |        | 2      | 5      | 27     | 23     | 18     | 26     | 34     | 18     | 23     | 8         | 37     | 9      | 3     |     |         |    |    |     | 233    |         |         |
| Class A     |       |        |        |        |        |        | 0      | 2      | 12     | 15     | 16     | 7      | 13     | 10     | 8      | 2         | 10     | 4      | 1     |     |         |    |    |     | 100    |         |         |
| Production  |       |        |        |        |        |        | 530    | 3 708  | 19 261 | 35 422 | 13 054 | 18 861 | 18 861 | 14 160 | 16 084 | 6 995     | 26 655 | 10 531 | 1 927 |     |         |    |    |     |        | 186 049 |         |
| Area V      |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |       |     |         |    |    |     |        |         |         |
| Class A     |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |       |     |         |    |    |     |        |         | 137     |
| Class B     |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |       |     |         |    |    |     |        |         | 54      |
| Production  |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |       |     |         |    |    |     |        |         | 125 882 |
| All areas   |       |        |        |        |        |        |        |        |        |        |        |        |        |        |        |           |        |        |       |     |         |    |    |     |        |         |         |
| Class A     | 2     | 18     | 19     | 19     | 20     | 51     | 58     | 69     | 73     | 85     | 54     | 65     | 40     | 78     | 15     | 16        | 5      | 4      | 11    |     |         |    |    |     | 601    |         |         |
| Class B     | 4     | 13     | 15     | 9      | 17     | 25     | 29     | 29     | 19     | 35     | 72     | 24     | 33     | 15     | 9      | 7         | 14     | 11     |       |     |         |    |    | 337 |        |         |         |
| Production  | 2 213 | 10 853 | 16 569 | 19 990 | 16 189 | 35 800 | 69 192 | 57 356 | 72 249 | 79 123 |        | 39 549 | 48 903 | 29 946 | 63 274 | 16 730    | 9 867  | 8 842  | 4 980 |     | 600 156 |    |    |     |        |         |         |

Table 12. Number of vessel deliveries and whitefish landings (kg round weight) by weekly interval for each administrative area, summer season 1984.

| Week<br>Ending   | June  |        |        |        | July   |       |        |        |        | August |        |        |        |        | September |        |        |        |        | October |     |     | Total  |         |         |
|------------------|-------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|--------|--------|---------|-----|-----|--------|---------|---------|
|                  | 3     | 10     | 17     | 24     | 1      | 8     | 15     | 22     | 29     | 5      | 12     | 19     | 26     |        | 2         | 9      | 16     | 23     | 30     | 7       | 14  | 21  |        |         |         |
| <b>Area I E</b>  |       |        |        |        |        |       |        |        |        |        |        |        |        |        |           |        |        |        |        |         |     |     |        |         |         |
| Class A          | 0     | 0      | 2      | 9      | 4      | 4     | 5      | 8      | 10     | 6      | 8      | 6      | 5      |        | 2         | 4      | 4      | 6      | 4      | 4       | 1   | 1   | 92     |         |         |
| Class B          | 2     | 4      | 17     | 8      | 5      | 7     | 7      | 3      | 5      | 8      | 8      | 15     | 9      |        | 1         | 5      | 1      | 5      | 5      | 12      | 1   | 1   | 126    |         |         |
| Production       | 551   | 488    | 1 528  | 7 106  | 3 884  | 4 079 | 2 226  | 3 091  | 6 423  | 5 680  | 11 453 | 5 275  | 4 321  |        | 1 813     | 702    | 3 497  | 3 518  | 1 521  | 7 143   | 974 | 974 | 75 273 |         |         |
| <b>Area IV</b>   |       |        |        |        |        |       |        |        |        |        |        |        |        |        |           |        |        |        |        |         |     |     |        |         |         |
| Class A          | 1     | 11     | 12     |        | 6      | 3     | 5      | 8      | 9      |        | 15     |        |        |        |           |        |        |        |        |         |     |     |        | 70      |         |
| Class B          | 8     | 10     | 33     |        | 3      | 1     | 1      | 0      | 0      |        | 0      |        |        |        |           |        |        |        |        |         |     |     |        | 46      |         |
| Production       | 2 609 | 18 082 | 22 879 |        | 6 945  | 2 144 | 3 794  | 9 875  | 11 646 |        | 23 393 |        |        |        |           |        |        |        |        |         |     |     |        | 101 367 |         |
| <b>Area II</b>   |       |        |        |        |        |       |        |        |        |        |        |        |        |        |           |        |        |        |        |         |     |     |        |         |         |
| Class A          |       |        |        |        | 5      | 6     | 26     | 20     | 21     |        | 30     | 20     | 19     | 13     |           | 13     |        |        |        |         |     |     |        | 173     |         |
| Class B          |       |        |        |        | 0      | 0     | 0      | 0      | 0      |        | 6      | 7      | 0      | 0      |           | 0      |        |        |        |         |     |     |        | 13      |         |
| Production       |       |        |        |        | 1 581  | 2 484 | 7 515  | 25     | 337    | 24 894 | 31 543 | 17 778 | 13 627 | 8 314  |           | 7 475  |        |        |        |         |     |     |        | 140 548 |         |
| <b>Area III</b>  |       |        |        |        |        |       |        |        |        |        |        |        |        |        |           |        |        |        |        |         |     |     |        |         |         |
| Class A          | 0     | 0      | 0      | 0      | 1      | 0     | 0      | 0      | 0      |        | 0      | 0      | 0      | 0      |           | 0      | 0      | 0      | 0      | 0       | 0   | 0   | 0      | 1       |         |
| Class B          | 6     | 19     | 10     | 7      | 18     | 9     | 4      |        |        |        | 3      | 3      | 2      | 1      |           | 1      | 1      | 3      | 3      | 4       | 4   | 4   | 4      | 90      |         |
| Production       | 1 572 | 2 514  | 1 841  | 915    | 3 086  | 1 778 | 731    |        |        |        | 420    | 1 782  | 507    | 1 266  |           | 339    | 124    | 1 317  | 2 023  | 942     | 937 | 937 | 937    | 22 144  |         |
| <b>Area IV</b>   |       |        |        |        |        |       |        |        |        |        |        |        |        |        |           |        |        |        |        |         |     |     |        |         |         |
| Class A          |       |        |        |        |        | 7     | 13     | 15     |        |        | 21     | 10     | 15     | 10     |           | 19     | 20     | 46     | 9      | 36      |     | 1   |        | 222     |         |
| Class B          |       |        |        |        |        | 16    | 31     | 15     |        |        | 11     | 12     | 9      | 7      |           | 6      | 6      | 11     | 2      | 10      |     |     |        | 145     |         |
| Production       |       |        |        |        |        | 6 866 | 15 488 | 12 455 |        |        | 12 613 | 9 647  | 10 796 | 5 472  |           | 13 420 | 17 492 | 38 447 | 9 959  | 44 464  |     |     | 1 193  | 198 312 |         |
| <b>Area V</b>    |       |        |        |        |        |       |        |        |        |        |        |        |        |        |           |        |        |        |        |         |     |     |        |         |         |
| Class A          |       |        |        |        |        | 2     | 7      | 3      |        |        | 5      | 2      | 2      | 2      |           | 1      | 7      | 57     | 18     | 40      |     |     |        | 155     |         |
| Class B          |       |        |        |        |        | 0     | 0      | 0      |        |        | 0      | 0      | 0      | 0      |           | 0      | 0      | 0      | 0      | 0       |     |     | 0      |         |         |
| Production       |       |        |        |        |        | 842   | 3 432  | 2 852  |        |        | 8 707  | 2 812  | 3 040  | 1 579  |           | 695    | 7 237  | 39 787 | 11 649 | 26 124  |     |     |        | 108 756 |         |
| <b>All areas</b> |       |        |        |        |        |       |        |        |        |        |        |        |        |        |           |        |        |        |        |         |     |     |        |         |         |
| Class A          | 0     | 1      | 13     | 21     | 15     | 13    | 46     | 56     | 58     |        | 77     | 40     | 42     | 30     |           | 35     | 31     | 107    | 33     | 80      |     | 5   | 1      | 713     |         |
| Class B          | 2     | 12     | 33     | 50     | 18     | 15    | 34     | 43     | 24     |        | 28     | 31     | 26     | 17     |           | 8      | 12     | 15     | 10     | 28      |     | 16  | 1      | 422     |         |
| Production       | 551   | 3 097  | 21 182 | 32 499 | 14 251 | 9 622 | 24 329 | 54 001 | 59 001 |        | 82 356 | 43 472 | 31 245 | 20 952 |           | 23 742 | 25 555 | 43 048 | 27 149 | 73 101  |     |     | 9 273  | 974     | 646 400 |

Table 13. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for all areas, summer 1983.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| June 26      | 2 213                       | 212  | 10.4                                |
| Total        | 2 213                       | 212  | 10.4                                |
| July 3       | 10 853                      | 1 540  | 7.0                                 |
| 10           | 16 569                      | 1 646  | 10.1                                |
| 17           | 19 990                      | 1 550  | 12.9                                |
| 24           | 16 189                      | 1 752  | 9.2                                 |
| 31           | 35 800                      | 4 174  | 8.6                                 |
| Total        | 99 401                      | 10 662                                       | 9.3                                 |
| August 7     | 69 192                      | 4 756  | 14.5                                |
| 14           | 57 356                      | 5 570  | 10.3                                |
| 21           | 72 240                      | 5 706  | 12.7                                |
| 28           | 79 123                      | 6 850  | 11.6                                |
| Total        | 277 911                     | 22 882                                       | 12.1                                |
| September 4  | 39 549                      | 4 348  | 9.1                                 |
| 11           | 48 903                      | 5 194  | 9.4                                 |
| 18           | 28 986                      | 3 312  | 8.8                                 |
| 25           | 63 274                      | 6 300  | 10.0                                |
| Total        | 180 712                     | 19 154                                       | 9.4                                 |
| October 2    | 16 230                      | 1 254  | 12.9                                |
| 9            | 9 867                       | 1 296  | 7.6                                 |
| 16           | 8 842                       | 594  | 14.9                                |
| 23           | 4 980                       | 472  | 10.6                                |
| Total        | 39 919                      | 3 616  | 11.0                                |
| Season Total | 600 156                     | 56 526                                       | 10.6                                |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 14. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for all areas, summer 1984.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| June 3       | 551                         | 36   | 15.3                                |
| 10           | 3 097                       | 287  | 10.8                                |
| 17           | 21 182                      | 1 517  | 14.0                                |
| 24           | 32 499                      | 2 391  | 13.6                                |
| Total        | 57 329                      | 4 231  | 13.5                                |
| July 1       | 14 251                      | 1 389  | 10.3                                |
| 8            | 9 622                       | 1 193  | 8.1                                 |
| 15           | 24 329                      | 3 878  | 6.3                                 |
| 22           | 59 001                      | 4 750  | 12.4                                |
| 29           | 59 001                      | 4 550  | 13.0                                |
| Total        | 166 204                     | 15 760                                       | 10.5                                |
| August 5     | 82 356                      | 5 971  | 13.8                                |
| 12           | 43 472                      | 3 380  | 12.9                                |
| 19           | 33 245                      | 3 450  | 9.6                                 |
| 26           | 20 952                      | 2 436  | 8.6                                 |
| Total        | 180 025                     | 15 237                                       | 11.8                                |
| September 2  | 23 742                      | 2 629  | 9.0                                 |
| 9            | 25 555                      | 2 417  | 10.6                                |
| 16           | 83 048                      | 7 867  | 10.6                                |
| 23           | 27 149                      | 2 523  | 10.8                                |
| 30           | 73 101                      | 6 823  | 10.7                                |
| Total        | 232 595                     | 22 259                                       | 10.4                                |
| October 7    | 0                           | 0  |                                     |
| 14           | 10 247                      | 643  | 15.9                                |
| 21           | 0                           | 0  |                                     |
| Total        | 10 247                      | 643  | 15.9                                |
| Season Total | 646 400                     | 58 130                                       | 11.1                                |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 15. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area 1E, summer 1983.

| Week Ending         | Production (kg round wt) | No. of nets used <sup>1</sup> (91 m each) | CPUE (kg/91 m/24 h) <sup>2</sup> |
|---------------------|--------------------------|---|----------------------------------|
| July 3              | 1 353                    | 228                                       | 5.9                              |
| 10                  | 1 473                    | 366                                       | 4.0                              |
| 17                  | 7 025                    | 402                                       | 17.5                             |
| 24                  | 1 002                    | 96  | 10.4                             |
| 31                  | 4 794                    | 524                                       | 9.1                              |
| <b>Total</b>        | <b>15 647</b>            | <b>1 616</b>                              | <b>9.7</b>                       |
| August 7            | 6 979                    | 460                                       | 15.2                             |
| 14                  | 2 273                    | 296                                       | 7.7                              |
| 21                  | 3 680                    | 312                                       | 11.8                             |
| 28                  | 3 177                    | 376                                       | 8.5                              |
| <b>Total</b>        | <b>16 109</b>            | <b>1 444</b>                              | <b>11.2</b>                      |
| September 4         | 2 723                    | 392                                       | 6.9                              |
| 11                  | 358                      | 122                                       | 2.9                              |
| 18                  | 1 669                    | 524                                       | 3.2                              |
| 25                  | 1 146                    | 186                                       | 6.2                              |
| <b>Total</b>        | <b>5 896</b>             | <b>1 224</b>                              | <b>10.5</b>                      |
| October 2           | 967                      | 196                                       | 4.9                              |
| 9                   | 1 549                    | 180                                       | 8.6                              |
|                     | 7 896                    | 530                                       | 14.9                             |
| 23                  | 3 206                    | 392                                       | 8.2                              |
| <b>Total</b>        | <b>13 618</b>            | <b>1 298</b>                              | <b>10.5</b>                      |
| <b>Season Total</b> | <b>51 270</b>            | <b>5 582</b>                              | <b>9.2</b>                       |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 16. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area 1E, summer 1984.

| Week Ending         | Production (kg round wt) | No. of nets used <sup>1</sup> (91 m each) | CPUE (kg/91 m/24 h) <sup>2</sup> |
|---------------------|--------------------------|---|----------------------------------|
| June 3              | 551                      | 36  | 15.3                             |
| 10                  | 488                      | 72  | 6.8                              |
| 17                  | 1 528                    | 448                                       | 3.4                              |
| 24                  | 7 106                    | 783                                       | 9.1                              |
| <b>Total</b>        | <b>9 673</b>             | <b>1 339</b>                              | <b>7.2</b>                       |
| July 1              | 3 884                    | 374                                       | 10.4                             |
| 8                   | 4 079                    | 410                                       | 9.9                              |
| 15                  | 2 226                    | 481                                       | 4.6                              |
| 22                  | 3 091                    | 622                                       | 5.0                              |
| 29                  | 6 423                    | 800                                       | 8.0                              |
| <b>Total</b>        | <b>119 703</b>           | <b>12 687</b>                             | <b>7.3</b>                       |
| August 5            | 5 680                    | 570                                       | 10.0                             |
| 12                  | 11 453                   | 712                                       | 16.0                             |
| 19                  | 5 275                    | 696                                       | 7.6                              |
| 26                  | 4 321                    | 517                                       | 8.4                              |
| <b>Total</b>        | <b>126 729</b>           | <b>12 495</b>                             | <b>10.7</b>                      |
| September 2         | 1 813                    | 160                                       | 11.3                             |
| 9                   | 702                      | 374                                       | 1.9                              |
| 16                  | 3 497                    | 302                                       | 11.6                             |
| 23                  | 3 518                    | 516                                       | 6.8                              |
| 30                  | 1 521                    | 374                                       | 4.1                              |
| <b>Total</b>        | <b>11 051</b>            | <b>1 726</b>                              | <b>6.4</b>                       |
| October 7           | 0                        | 0   |                                  |
| 14                  | 7 143                    | 500                                       | 14.3                             |
| 21                  | 974                      | 89  | 10.9                             |
| <b>Total</b>        | <b>8 117</b>             | <b>589</b>                                | <b>13.8</b>                      |
| <b>Season Total</b> | <b>75 273</b>            | <b>8 836</b>                              | <b>8.5</b>                       |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 17. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area IW, summer 1983.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| June 26      | 1 751                       | 180  | 9.7                                 |
| Total        | 1 751                       | 180  | 9.7                                 |
| July 3       | 8 029                       | 1 206  | 6.7                                 |
| 10           | 11 430                      | 936  | 12.2                                |
| 17           | 10 665                      | 524  | 20.4                                |
| 24           | 3 171                       | 228  | 13.9                                |
| 31           | 3 436                       | 64   | 53.7                                |
| Total        | 36 731                      | 2 958  | 12.4                                |
| August 7     | 3 377                       | 96   | 35.2                                |
| 14           | 6 530                       | 170  | 38.4                                |
| 21           | 1 932                       | 180  | 10.7                                |
| 28           | 2 658                       | 228  | 11.7                                |
| Total        | 14 497                      | 674  | 21.5                                |
| September 4  | 3 988                       | 296  | 13.5                                |
| 11           | 2 274                       | 222  | 10.2                                |
| 18           | 2 631                       | 222  | 11.9                                |
| Total        | 8 893                       | 740  | 12.0                                |
| Season Total | 61 872                      | 4 552  | 13.6                                |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 18. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area IW, summer 1984.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| June 10      | 2 609                       | 215  | 12.1                                |
| 17           | 18 082                      | 961  | 18.8                                |
| 24           | 22 879                      | 1 266  | 18.1                                |
| Total        | 43 570                      | 2 442  | 17.8                                |
| July 1       | 6 945                       | 480  | 14.5                                |
| 8            | 2 144                       | 231  | 9.3                                 |
| 15           | 3 794                       | 373  | 10.2                                |
| 22           | 9 875                       | 568  | 17.4                                |
| 29           | 11 646                      | 639  | 18.2                                |
| Total        | 34 404                      | 2 291  | 15.0                                |
| August 5     | 23 393                      | 1 065  | 22.0                                |
| Total        | 23 393                      | 1 065  | 22.0                                |
| Season Total | 101 367                     | 5 798  | 17.5                                |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 19. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area II, summer 1983.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| July 17      | 1 404                       | 518  | 2.7                                 |
| 24           | 4 060                       | 666  | 6.1                                 |
| 31           | 6 940                       | 1 332  | 5.2                                 |
| Total        | 12 404                      | 2 516  | 4.9                                 |
| August 7     | 13 466                      | 1 406  | 9.6                                 |
| 14           | 20 721                      | 1 924  | 10.8                                |
| 21           | 35 479                      | 1 998  | 17.8                                |
| 28           | 26 729                      | 1 998  | 13.4                                |
| Total        | 96 395                      | 7 326  | 13.2                                |
| September 4  | 9 141                       | 1 480  | 6.2                                 |
| 11           | 16 267                      | 1 702  | 9.6                                 |
| 18           | 4 065                       | 666  | 6.1                                 |
| 25           | 14 824                      | 1 258  | 11.8                                |
| Total        | 44 297                      | 5 106  | 8.7                                 |
| Season Total | 153 096                     | 14 948                                       | 10.2                                |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 20. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area II, summer 1984.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| July 1       | 1 581                       | 355  | 4.5                                 |
| 8            | 2 484                       | 426  | 5.8                                 |
| 15           | 7 515                       | 1 846  | 4.1                                 |
| 22           | 25 337                      | 1 420  | 17.8                                |
| 29           | 24 894                      | 1 491  | 16.7                                |
| Total        | 61 811                      | 5 538  | 11.2                                |
| August 5     | 31 543                      | 2 238  | 14.1                                |
| 12           | 17 778                      | 1 546  | 11.5                                |
| 22           | 13 627                      | 1 349  | 10.1                                |
| 29           | 8 314                       | 923  | 9.0                                 |
| Total        | 71 262                      | 6 056  | 11.8                                |
| September 2  | 7 475                       | 923  | 8.1                                 |
| Total        | 7 475                       | 923  | 8.1                                 |
| Season Total | 140 548                     | 12 517                                       | 11.2                                |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 21. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area III, summer 1983.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| June 26      | 462                         | 32   | 14.4                                |
| Total        | 462                         | 32   | 14.4                                |
| July 3       | 1 471                       | 106  | 13.9                                |
| 10           | 3 136                       | 196  | 16.0                                |
| 17           | 896                         | 106  | 8.5                                 |
| 24           | 4 248                       | 360  | 11.8                                |
| 31           | 1 369                       | 64   | 21.4                                |
| Total        | 11 120                      | 832  | 13.4                                |
| August 7     | 1 764                       | 112  | 15.8                                |
| 14           | 701                         | 80   | 8.8                                 |
| 21           | 932                         | 80   | 11.7                                |
| 28           | 1 761                       | 112  | 15.7                                |
| Total        | 5 158                       | 384  | 13.4                                |
| September 4  | 794                         | 64   | 12.4                                |
| 11           | 792                         | 64   | 12.4                                |
| 18           | 762                         | 64   | 15.9                                |
| 25           | 179                         | 16   | 11.2                                |
| Total        | 2 527                       | 208  | 12.2                                |
| October 2    |                             |  |                                     |
| 9            |                             |  |                                     |
| 16           | 946                         | 64   | 14.8                                |
| 23           | 1 774                       | 80   | 22.2                                |
| Total        | 2 720                       | 144  | 18.9                                |
| Season Total | 21 987                      | 1 600  | 13.7                                |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 22. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area III, summer 1984.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| June 17      | 1 572                       | 108  | 14.6                                |
| 24           | 2 514                       | 347  | 7.4                                 |
| Total        | 4 086                       | 450  | 9.1                                 |
| July 1       | 1 841                       | 180  | 10.2                                |
| 8            | 915                         | 126  | 7.3                                 |
| 15           | 3 086                       | 251  | 12.3                                |
| 22           | 1 778                       | 162  | 11.0                                |
| 29           | 731                         | 72   | 10.2                                |
| Total        | 8 351                       | 791  | 10.6                                |
| August 5     | 420                         | 54   | 7.8                                 |
| 12           | 1 782                       | 54   | 33.0                                |
| 19           | 507                         | 36   | 14.1                                |
| 26           | 1 266                       | 18   | 70.3                                |
| Total        | 3 975                       | 162  | 24.5                                |
| September 2  | 339                         | 18   | 18.8                                |
| 9            | 124                         | 18   | 6.9                                 |
| 16           | 1 317                       | 54   | 24.4                                |
| 23           | 2 023                       | 54   | 37.5                                |
| 30           | 992                         | 72   | 13.8                                |
| Total        | 4 795                       | 216  | 22.2                                |
| October 7    | 0                           | 0  |                                     |
| 14           | 937                         | 72   | 13.0                                |
| Total        | 937                         | 72   | 13.0                                |
| Season Total | 22 144                      | 1 691  | 13.1                                |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 23. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area IV, summer 1983.

| Week Ending         | Production (kg round wt) | No. of nets used <sup>1</sup> (91 m each) | CPUE (kg/91 m/24 h) <sup>2</sup> |
|---------------------|--------------------------|---|----------------------------------|
| July 10             | 530                      | 148                                       | 3.6                              |
| 17                  | 0                        | 0   |                                  |
| 24                  | 3 708                    | 402                                       | 9.2                              |
| 31                  | 19 261                   | 2 190                                     | 8.8                              |
| <b>Total</b>        | <b>23 499</b>            | <b>2 740</b>                              | <b>8.6</b>                       |
| August 7            | 35 422                   | 1 942                                     | 18.2                             |
| 14                  | 13 054                   | 1 588                                     | 8.2                              |
| 21                  | 18 861                   | 2 036                                     | 9.5                              |
| 28                  | 18 861                   | 2 724                                     | 6.9                              |
| <b>Total</b>        | <b>86 198</b>            | <b>8 290</b>                              | <b>10.4</b>                      |
| September 4         | 14 160                   | 1 492                                     | 9.5                              |
| 11                  | 16 084                   | 1 830                                     | 8.8                              |
| 18                  | 6 995                    | 624                                       | 11.2                             |
| 25                  | 26 655                   | 2 898                                     | 9.2                              |
| <b>Total</b>        | <b>63 894</b>            | <b>6 844</b>                              | <b>9.3</b>                       |
| October 2           | 10 531                   | 730                                       | 14.4                             |
| 9                   | 1 927                    | 238                                       | 8.1                              |
| <b>Total</b>        | <b>12 458</b>            | <b>968</b>                                | <b>12.9</b>                      |
| <b>Season Total</b> | <b>86 049</b>            | <b>18 842</b>                             | <b>9.9</b>                       |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 24. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area IV, summer 1984.

| Week Ending         | Production (kg round wt) | No. of nets used <sup>1</sup> (91 m each) | CPUE (kg/91 m/24 h) <sup>2</sup> |
|---------------------|--------------------------|---|----------------------------------|
| July 15             | 6 866                    | 785                                       | 8.7                              |
| 22                  | 15 488                   | 1 481                                     | 10.4                             |
| 29                  | 12 455                   | 1 335                                     | 9.3                              |
| <b>Total</b>        | <b>34 809</b>            | <b>3 601</b>                              | <b>9.7</b>                       |
| August 5            | 12 613                   | 1 689                                     | 7.5                              |
| 12                  | 9 547                    | 926                                       | 10.4                             |
| 19                  | 10 796                   | 1 227                                     | 8.8                              |
| 26                  | 5 472                    | 836                                       | 6.5                              |
| <b>Total</b>        | <b>38 528</b>            | <b>4 678</b>                              | <b>8.2</b>                       |
| September 2         | 13 420                   | 1 457                                     | 9.2                              |
| 9                   | 17 492                   | 1 528                                     | 11.4                             |
| 16                  | 38 447                   | 3 464                                     | 11.1                             |
| 23                  | 9 959                    | 675                                       | 14.8                             |
| 30                  | 44 464                   | 2 898                                     | 15.3                             |
| <b>Total</b>        | <b>123 782</b>           | <b>10 022</b>                             | <b>12.4</b>                      |
| October 7           | 0                        | 0   |                                  |
| 14                  | 1 193                    | 71  | 16.8                             |
| <b>Total</b>        | <b>1 193</b>             | <b>71</b>                                 | <b>16.8</b>                      |
| <b>Season Total</b> | <b>198 312</b>           | <b>18 372</b>                             | <b>10.8</b>                      |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 25. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area V, summer 1983.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| August       | 7 8 184                     | 740  | 11.1                                |
|              | 14 077                      | 1 496  | 9.4                                 |
|              | 21 11 356                   | 1 100  | 10.3                                |
|              | 28 25 937                   | 1 428  | 18.2                                |
| Total        | 59 554                      | 4 764  | 12.5                                |
| September    | 4 8 743                     | 624  | 14.0                                |
|              | 11 13 128                   | 1 254  | 10.5                                |
|              | 18 12 864                   | 1 212  | 10.6                                |
|              | 25 20 470                   | 1 942  | 10.5                                |
| Total        | 55 205                      | 5 032  | 11.0                                |
| October      | 2 4 732                     | 328  | 14.4                                |
|              | 9 6 391                     | 878  | 7.3                                 |
| Total        | 11 123                      | 1 206  | 9.2                                 |
| Season Total | 125 882                     | 11 002                                       | 11.4                                |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 26. Total whitefish production, estimates for total number of nets used and CPUE by weekly interval for Area V, summer 1984.

| Week Ending  | Production<br>(kg round wt) | No. of nets used <sup>1</sup><br>(91 m each) | CPUE<br>(kg/91 m/24 h) <sup>2</sup> |
|--------------|-----------------------------|--|-------------------------------------|
| July         | 15 842                      | 142  | 5.9                                 |
|              | 22 3 432                    | 497  | 6.9                                 |
|              | 29 2 852                    | 213  | 13.4                                |
| Total        |                             | 852  | 8.4                                 |
| August       | 5 8 707                     | 355  | 24.5                                |
|              | 12 2 812                    | 142  | 19.8                                |
|              | 19 3 040                    | 142  | 21.4                                |
|              | 26 1 579                    | 142  | 11.1                                |
| Total        |                             | 781  | 20.7                                |
| September    | 2 695                       | 71   | 9.8                                 |
|              | 9 7 237                     | 497  | 14.6                                |
|              | 16 39 787                   | 4 047  | 9.8                                 |
|              | 23 11 640                   | 1 278  | 9.1                                 |
|              | 30 26 124                   | 3 479  | 7.5                                 |
| Total        |                             | 9 372  | 9.1                                 |
| Season Total |                             | 108 756                                      | 9.9                                 |

<sup>1</sup> Refer to materials and methods for calculation.

<sup>2</sup> Round weight.

Table 27. Percent cullage of lake whitefish by nights nets down for areas IW and IE of Great Slave Lake during winter fishery observations, 1983-1984 and 1984-1985.

| Area                              | Licence Class | No. of Observations | No. Nights Nets Down | No. Nets Used | Whitefish Caught |            |          |
|-----------------------------------|---------------|---------------------|----------------------|---------------|------------------|------------|----------|
|                                   |               |                     |                      |               | Total            | No. Culled | % Culled |
| IW (1983-84)                      | A             | 1                   | 3                    | 11            | 148              | 0          | 0.0      |
|                                   |               | 1                   | 4                    | 4             | 177              | 15         | 8.5      |
|                                   |               | 1                   | 6                    | 8             | 233              | 72         | 30.9     |
| IE (1983-84)                      | A             | 1                   | 3                    | 10            | 208              | 1          | 0.5      |
|                                   |               | 2                   | 4                    | 7             | 302              | 25         | 8.3      |
| IW (1984-85)                      | A             | 2                   | 2                    | 10            | 174              | 1          | 0.6      |
|                                   |               | 5                   | 3                    | 22            | 425              | 2          | 0.5      |
| IE (1984-85)                      | A             | 3                   | 3                    | 13            | 198              | 2          | 1.0      |
|                                   |               | 1                   | 4                    | 4             | 127              | 7          | 5.5      |
| Combined by number of nights down |               | 2                   | 2                    | 10            | 174              | 1          | 0.6      |
|                                   |               | 11                  | 3                    | 56            | 979              | 5          | 0.5      |
|                                   |               | 3                   | 4                    | 15            | 606              | 47         | 7.8      |
|                                   |               | 1                   | 6                    | 8             | 233              | 72         | 30.9     |

Table 28. Summary information from winter fishery observations on Great Slave Lake, N.W.T. for 1983-1984 and 1984-1985.

| Area                               | 1983-1984           |                  |                  | 1984-1985           |                  |                  |
|------------------------------------|---------------------|------------------|------------------|---------------------|------------------|------------------|
|                                    | No. of Observations | No. of Nets Used | No. Fishing Days | No. of Observations | No. of nets Used | No. Fishing Days |
| IW                                 | 3                   | 23               | 13               | 7                   | 32               | 18               |
| IE                                 | 3                   | 17               | 10               | 4                   | 17               | 13               |
| <b>Total</b>                       | <b>6</b>            | <b>40</b>        | <b>23</b>        | <b>11</b>           | <b>49</b>        | <b>31</b>        |
| Mean no. nets fished/bombardier    |                     | 39.2             |                  |                     | 49.8             |                  |
| Mean no. days fished between lifts |                     | 3.8              |                  |                     | 2.8              | 23               |
| Mean no. nets lifted/day           |                     | 10.3             |                  |                     | 17.8             |                  |
| Depth of net (meshes)              |                     | 8-40             |                  |                     | 16-80            |                  |
| Mean No. persons/bombardier        |                     | 3.2              |                  |                     | 3.4              |                  |
| % 139 mm nets used                 |                     | 0.0              |                  |                     | 8.2              |                  |

Table 29. Species composition and catch per unit effort (CPUE) for Area IW and Area IE from winter fishery observations, 1983-1984 and 1984-1985.

|                            | Area IW 1983-84<br>Fish Caught |               |                  |                 | Area IW 1984-85<br>Fish Caught |               |      |     | Area IE 1983-84<br>Fish Caught |               |      |      | Area IE 1984-85<br>Fish Caught |               |      |     | Total<br>Fish Caught |               |      |     |
|----------------------------|--------------------------------|---------------|------------------|-----------------|--------------------------------|---------------|------|-----|--------------------------------|---------------|------|------|--------------------------------|---------------|------|-----|----------------------|---------------|------|-----|
|                            | CPUE                           |               | CPUE             |                 | CPUE                           |               | CPUE |     | CPUE                           |               | CPUE |      | CPUE                           |               | CPUE |     | CPUE                 |               | CPUE |     |
|                            | No.                            | % of<br>Total | No. <sup>2</sup> | Wt <sup>3</sup> | No.                            | % of<br>Total | No.  | Wt  | No.                            | % of<br>Total | No.  | Wt   | No.                            | % of<br>Total | No.  | Wt  | No.                  | % of<br>Total | No.  | Wt  |
| Lake Whitefish             | 550                            | 70.5          | 5.1              | 5.6             | 599                            | 68.8          | 7.2  | 7.9 | 510                            | 56.5          | 9.1  | 10.0 | 325                            | 64.0          | 5.9  | 6.5 | 1992                 | 64.8          | 6.6  | 7.2 |
| Lake Trout                 | 0                              |               |                  |                 | 12                             | 1.4           | 0.1  |     | 5                              | 0.6           | 0.1  |      | 0                              |               |      |     | 17                   | 0.6           | 0.1  |     |
| Walleye                    | 2                              | 0.3           | <0.1             |                 | 1                              | 0.1           | <0.1 |     | 0                              |               |      |      | 0                              |               |      |     | 3                    | 0.1           | <0.1 |     |
| Northern Pike              | 78                             | 9.8           | 0.1              |                 | 152                            | 17.5          | 1.8  |     | 0                              |               |      |      | 0                              |               |      |     | 230                  | 7.5           | 0.8  |     |
| Inconnu                    | 3                              | 0.4           | <0.1             |                 | 5                              | 0.6           | 0.1  |     | 103                            | 11.4          | 1.8  |      | 14                             | 2.8           | 0.3  |     | 125                  | 4.1           | 0.4  |     |
| Cisco                      | 7                              | 0.9           | 0.1              |                 | 17                             | 2.0           | 0.2  |     | 49                             | 5.4           | 0.9  |      | 27                             | 5.3           | 0.5  |     | 100                  | 3.3           | 0.3  |     |
| Longnose Sucker            | 66                             | 8.3           | 0.6              |                 | 4                              | 0.5           | 0.1  |     | 94                             | 10.4          | 1.7  |      | 84                             | 16.5          | 1.5  |     | 248                  | 8.1           | 0.8  |     |
| Rubbot                     | 78                             | 9.8           | 0.7              |                 | 81                             | 9.3           | 1.0  |     | 141                            | 15.6          | 2.5  |      | 58                             | 11.4          | 1.1  |     | 358                  | 11.6          | 1.2  |     |
| Total                      | 792                            |               | 7.3              |                 | 871                            |               | 10.5 |     | 902                            |               | 16.1 |      | 508                            |               | 9.2  |     | 3073                 |               | 10.1 |     |
| Meters of Net <sup>1</sup> | 9919                           |               |                  |                 | 7553                           |               |      |     | 5096                           |               |      |      | 5005                           |               |      |     | 27573                |               |      |     |

<sup>1</sup> Number of nets observed x 91 m x number of days nets were set.

<sup>2</sup> Number of fish/91 m of net/24 hour period.

<sup>3</sup> Pound weight of fish (kg)/91 m of net/24 hour period.

<sup>4</sup> Mean round weight converted from dressed weight of 1983 winter plant samples.

Table 30. Weight composition by market weight intervals for lake whitefish from commercial plant samples on Great Slave Lake, 1983.

| MARKET WEIGHT INTERVAL (DRESSED) | AREA I E NO. | AREA I W % | AREA II NO. | AREA II % | AREA III NO. | AREA III % | AREA IV NO. | AREA IV % | AREA V NO. | AREA V % | TOTAL NO. | TOTAL % |
|----------------------------------|--------------|------------|-------------|-----------|--------------|------------|-------------|-----------|------------|----------|-----------|---------|
| NO MARKET                        | 2            | -          | -           | -         | 2            | -          | -           | -         | 11         | 2        | 1         | -       |
| 1+ 0.45 kg)                      |              |            |             |           |              |            |             |           |            |          | 18        | -       |
| SMALL (0.45-0.69 kg)             | 20           | 3          | 4           | -         | 23           | 5          | 19          | 8         | 53         | 8        | 7         | 2       |
| MEDIUM (0.70-1.39 kg)            | 580          | 89         | 372         | 89        | 380          | 86         | 188         | 88        | 519        | 83       | 377       | 90      |
| LARGE (1+ 1.40-1.80 kg)          | 41           | 7          | 39          | 9         | 29           | 7          | 3           | 1         | 31         | 5        | 27        | 6       |
| JUMBO (> 1.80 kg)                | 8            | -          | 5           | 1         | 5            | 1          | 3           | 1         | 13         | 2        | 7         | 2       |
|                                  |              |            |             |           |              |            |             |           |            |          | 39        | 1       |
| TOTAL                            | 829          |            | 420         |           | 419          |            | 213         |           | 627        |          | 419       |         |
|                                  |              |            |             |           |              |            |             |           |            |          | 2727      |         |

Table 31. Age composition of whitefish for all areas combined from Great Slave Lake commercial fishery, 1983.

| AGE (yr) | NO.  | %    | FORK LENGTH (mm) |      | DRESSED WEIGHT (g) |       |
|----------|------|------|------------------|------|--------------------|-------|
|          |      |      | MEAN             | SD.  | MEAN               | SD.   |
| 5        | 3    | 0.1  | 356              | 28.6 | 800                | 100.0 |
| 6        | 24   | 1.0  | 387              | 34.5 | 783                | 229.2 |
| 7        | 98   | 3.9  | 393              | 29.1 | 811                | 187.1 |
| 8        | 248  | 9.9  | 399              | 29.8 | 841                | 184.9 |
| 9        | 328  | 13.1 | 409              | 28.7 | 906                | 199.6 |
| 10       | 399  | 15.9 | 413              | 27.3 | 929                | 195.4 |
| 11       | 394  | 15.7 | 422              | 28.3 | 984                | 210.0 |
| 12       | 406  | 16.2 | 428              | 27.8 | 1012               | 221.7 |
| 13       | 341  | 13.6 | 439              | 28.1 | 1095               | 226.8 |
| 14       | 156  | 6.2  | 447              | 31.6 | 1178               | 304.7 |
| 15       | 63   | 2.5  | 472              | 34.9 | 1374               | 390.4 |
| 16       | 24   | 1.0  | 494              | 53.1 | 1513               | 654.8 |
| 17       | 14   | 0.6  | 481              | 39.5 | 1407               | 325.1 |
| 18       | 8    | 0.3  | 515              | 43.0 | 1750               | 481.8 |
| 20       | 1    | -    | 521              | -    | 1950               | -     |
| 21       | 1    | -    | 558              | -    | 2300               | -     |
| TOTAL    | 2508 |      |                  |      | 994                | 269.2 |
| MEAN     |      |      | 423              | 34.8 |                    |       |
| MEAN AGE | 10.9 |      |                  |      |                    |       |

Table 32. Age composition of commercial whitefish for each seasonal period from Area IV, 1983.

| AGE (yr) | WINTER   |      | SPRING   |      | FALL     |      | TOTAL            |                    |       |
|----------|----------|------|----------|------|----------|------|------------------|--------------------|-------|
|          | MEAN     | SD.  | MEAN     | SD.  | MEAN     | SD.  | FORK LENGTH (mm) | DRESSED WEIGHT (g) |       |
|          | NO. (mm) | (mm) | NO. (mm) | (mm) | NO. (mm) | (mm) | NO.              | MEAN SD.           |       |
| 5        | -        | -    | 1        | 381  | 700      | -    | 1                | 381                | -     |
| 6        | 2        | 371  | 725      | 7    | 413      | 971  | 9                | 404                | 38.0  |
| 7        | 8        | 389  | 817      | 12   | 410      | 817  | 18               | 403                | 23.4  |
| 8        | 18       | 405  | 892      | 20   | 429      | 1025 | 38               | 417                | 19.9  |
| 9        | 27       | 414  | 933      | 20   | 436      | 1115 | 47               | 423                | 23.2  |
| 10       | 53       | 412  | 927      | 28   | 445      | 1132 | 81               | 423                | 28.7  |
| 11       | 39       | 424  | 1012     | 20   | 450      | 1200 | 59               | 433                | 28.3  |
| 12       | 17       | 430  | 1032     | 25   | 459      | 1264 | 42               | 448                | 31.7  |
| 13       | 24       | 437  | 1063     | 27   | 485      | 1287 | 51               | 452                | 28.1  |
| 14       | 11       | 442  | 1168     | 10   | 471      | 1425 | 21               | 456                | 28.3  |
| 15       | 4        | 448  | 1175     | 7    | 478      | 1450 | 11               | 467                | 31.7  |
| 16       | -        | -    | 3        | 508  | 1617     | -    | 3                | 508                | 45.6  |
| 17       | 1        | 403  | 950      | -    | -        | -    | 1                | 403                | -     |
| 18       | -        | -    | -        | 1    | 538      | 1700 | 1                | 538                | -     |
| TOTAL    | 202      | 420  | 979      | 181  | 448      | 1181 | -                | 383                |       |
| MEAN     |          |      |          | 10.7 |          |      | 10.7             | 433                | 32.8  |
| MEAN AGE | 10.6     |      |          |      |          |      |                  | 1074               | 242.5 |

Table 33. Age composition of commercial whitefish for each seasonal period from Area 1E, 1983.

Table 34. Age composition of commercial whitefish for each seasonal period from Area II, 1983.

| AGE<br>(yr)   | WINTER               |             |              | SPRING              |             |              | FALL                |             |              | TOTAL               |             |                      |      |       |
|---------------|----------------------|-------------|--------------|---------------------|-------------|--------------|---------------------|-------------|--------------|---------------------|-------------|----------------------|------|-------|
|               | MEAN<br>FORK<br>LEN. | MEAN<br>DR. | MEAN<br>LEN. | MEAN<br>FORK<br>WT. | MEAN<br>DR. | MEAN<br>LEN. | MEAN<br>FORK<br>WT. | MEAN<br>DR. | MEAN<br>LEN. | MEAN<br>FORK<br>WT. | MEAN<br>DR. | DRESSED<br>WEIGHT(g) |      |       |
|               | NO. (mm)             | (g)         | NO. (mm)     | (g)                 | NO. (mm)    | (g)          | NO. (mm)            | (g)         | NO.          | MEAN<br>LENGTH(mm)  | SD.         | MEAN<br>SD.          |      |       |
| 5             | -                    | -           | -            | 1                   | 325         | 500          | 1                   | 363         | 600          | 2                   | 344         | 26.9                 | 550  | 70.7  |
| 6             | -                    | -           | -            | 4                   | 351         | 550          | 7                   | 393         | 793          | 11                  | 377         | 29.8                 | 705  | 180.9 |
| 7             | -                    | -           | -            | 29                  | 387         | 764          | 27                  | 403         | 865          | 56                  | 395         | 26.3                 | 813  | 180.0 |
| 8             | -                    | -           | -            | 28                  | 395         | 796          | 41                  | 416         | 943          | 69                  | 408         | 26.4                 | 883  | 178.4 |
| 9             | -                    | -           | -            | 61                  | 409         | 896          | 45                  | 437         | 1078         | 106                 | 421         | 27.7                 | 973  | 199.2 |
| 10            | -                    | -           | -            | 30                  | 413         | 923          | 33                  | 439         | 1103         | 63                  | 426         | 26.2                 | 1017 | 227.2 |
| 11            | -                    | -           | -            | 19                  | 424         | 963          | 29                  | 457         | 1271         | 48                  | 444         | 30.4                 | 1149 | 305.4 |
| 12            | -                    | -           | -            | 10                  | 432         | 1065         | 11                  | 463         | 1232         | 21                  | 448         | 36.8                 | 1152 | 303.1 |
| 13            | -                    | -           | -            | 8                   | 450         | 1163         | 2                   | 446         | 1175         | 10                  | 449         | 15.1                 | 1165 | 118.0 |
| 14            | -                    | -           | -            | -                   | -           | -            | 1                   | 518         | 2000         | 1                   | 518         | -                    | 2000 | -     |
| 15            | -                    | -           | -            | -                   | -           | -            | 1                   | 514         | 1800         | 1                   | 514         | -                    | 1800 | -     |
| TOTAL<br>MEAN | -                    | -           | -            | 190                 | 407         | 883          | 198                 | 432         | 1059         | 386                 | 420         | 33.8                 | 973  | 256.8 |
| MEAN AGE      | -                    | -           | -            | 9.1                 | -           | -            | 9.1                 | -           | -            | -                   | -           | -                    | -    | -     |

Table 35. Age composition of commercial whitefish for each seasonal period from Area III, 1983.

| AGE<br>(yr) | WINTER       |             | SPRING       |             | FALL         |             | NO.  | TOTAL           |     | DRESSED   |     |       |
|-------------|--------------|-------------|--------------|-------------|--------------|-------------|------|-----------------|-----|-----------|-----|-------|
|             | MEAN         |             | MEAN         |             | MEAN         |             |      | FORK LENGTH(mm) |     | WEIGHT(g) |     |       |
|             | FORK<br>LEN. | DR.<br>(mm) | FORK<br>LEN. | DR.<br>(mm) | FORK<br>LEN. | DR.<br>(mm) |      | MEAN            | SD. | MEAN      | SD. |       |
| NO.         | (mm)         | (g)         | NO.          | (mm)        | (g)          | NO.         | (mm) | (g)             | NO. | MEAN      | SD. |       |
| 8           | -            | -           | -            | 7           | 382          | 750         | -    | -               | -   | 7         | 382 | 23.4  |
| 9           | -            | -           | -            | 17          | 385          | 774         | -    | -               | -   | 17        | 385 | 20.7  |
| 10          | -            | -           | -            | 42          | 396          | 840         | -    | -               | -   | 42        | 396 | 22.8  |
| 11          | -            | -           | -            | 30          | 405          | 867         | -    | -               | -   | 30        | 405 | 21.5  |
| 12          | -            | -           | -            | 55          | 405          | 859         | -    | -               | -   | 55        | 405 | 15.5  |
| 13          | -            | -           | -            | 33          | 423          | 1012        | -    | -               | -   | 33        | 423 | 25.1  |
| 14          | -            | -           | -            | 7           | 432          | 1086        | -    | -               | -   | 7         | 432 | 26.1  |
| 15          | -            | -           | -            | 5           | 464          | 1550        | -    | -               | -   | 5         | 464 | 41.8  |
| TOTAL       | -            | -           | -            | 196         | 406          | 896         | -    | -               | -   | 196       | 406 | 26.4  |
| MEAN        | -            | -           | -            | 11.3        | -            | -           | -    | -               | -   | 896       | -   | 213.0 |
| MEAN AGE    | -            | -           | -            | 11.3        | -            | -           | -    | -               | -   | 11.3      | -   | -     |

Table 36. Age composition of commercial whitefish for each seasonal period from Area IV, 1983.

| AGE<br>(yr) | WINTER                           |                           | SPRING                           |                           | FALL                             |                           | NO.  | TOTAL              |      | DRESSED<br>WEIGHT(g) |     |      |      |       |
|-------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|------|--------------------|------|----------------------|-----|------|------|-------|
|             | MEAN<br>FORK<br>LEN.<br>NO. (mm) | MEAN<br>DR.<br>WT.<br>(g) | MEAN<br>FORK<br>LEN.<br>NO. (mm) | MEAN<br>DR.<br>WT.<br>(g) | MEAN<br>FORK<br>LEN.<br>NO. (mm) | MEAN<br>DR.<br>WT.<br>(g) |      | MEAN<br>LENGTH(mm) | SD.  |                      |     |      |      |       |
| 6           | -                                | -                         | 1                                | 419                       | 950                              | -                         | -    | 419                | -    | 950                  |     |      |      |       |
| 7           | 3                                | 326                       | 457                              | 3                         | 405                              | 867                       | 1    | 345                | 450  | 7                    | 363 | 44.2 | 636  | 241.0 |
| 8           | 23                               | 360                       | 620                              | 15                        | 421                              | 947                       | 19   | 378                | 879  | 57                   | 351 | 39.3 | 791  | 212.6 |
| 9           | 35                               | 379                       | 716                              | 15                        | 429                              | 1010                      | 24   | 388                | 785  | 74                   | 392 | 30.9 | 791  | 188.6 |
| 10          | 50                               | 389                       | 774                              | 23                        | 434                              | 1046                      | 16   | 399                | 831  | 89                   | 403 | 28.9 | 854  | 173.3 |
| 11          | 32                               | 397                       | 806                              | 23                        | 449                              | 1070                      | 30   | 404                | 843  | 85                   | 413 | 28.1 | 891  | 155.7 |
| 12          | 20                               | 404                       | 826                              | 23                        | 454                              | 1122                      | 48   | 411                | 890  | 89                   | 421 | 29.2 | 936  | 178.7 |
| 13          | 20                               | 425                       | 998                              | 33                        | 470                              | 1242                      | 40   | 422                | 988  | 93                   | 440 | 31.6 | 1080 | 235.0 |
| 14          | 12                               | 426                       | 1006                             | 24                        | 478                              | 1344                      | 24   | 435                | 1098 | 60                   | 451 | 36.9 | 1178 | 324.3 |
| 15          | 5                                | 468                       | 1230                             | 11                        | 506                              | 1637                      | 1    | 472                | 1300 | 17                   | 493 | 39.7 | 1498 | 492.1 |
| 16          | 2                                | 488                       | 1500                             | 4                         | 577                              | 2563                      | -    | -                  | -    | 6                    | 547 | 71.0 | 2208 | 948.4 |
| 17          | -                                | -                         | -                                | 1                         | 529                              | 1900                      | -    | -                  | -    | 1                    | 529 | -    | 1900 | -     |
| 18          | -                                | -                         | -                                | 3                         | 520                              | 1867                      | 1    | 498                | 1500 | 4                    | 515 | 42.3 | 1775 | 499.2 |
| TOTAL       | 202                              | 395                       | 807                              | 178                       | 459                              | 1209                      | 202  | 409                | 891  | 583                  | 419 | 44.1 | 959  | 328.8 |
| MEAN AGE    |                                  | 10.6                      |                                  | 11.8                      |                                  |                           | 11.4 |                    |      | 11.3                 |     |      |      |       |

Table 37. Age composition of commercial whitefish for each seasonal period from Area V, 1983.

| AGE<br>(yr) | WINTER                           |                           | SPRING                           |                           | FALL                             |                           | NO.  | TOTAL              |      | DRESSED<br>WEIGHT(g) |     |      |      |       |
|-------------|----------------------------------|---------------------------|----------------------------------|---------------------------|----------------------------------|---------------------------|------|--------------------|------|----------------------|-----|------|------|-------|
|             | MEAN<br>FORK<br>LEN.<br>NO. (mm) | MEAN<br>DR.<br>WT.<br>(g) | MEAN<br>FORK<br>LEN.<br>NO. (mm) | MEAN<br>DR.<br>WT.<br>(g) | MEAN<br>FORK<br>LEN.<br>NO. (mm) | MEAN<br>DR.<br>WT.<br>(g) |      | MEAN<br>LENGTH(mm) | SD.  |                      |     |      |      |       |
| 7           | -                                | -                         | -                                | 1                         | 347                              | 500                       | -    | -                  | -    | 1                    | 347 | -    | 500  | -     |
| 8           | -                                | -                         | -                                | 5                         | 406                              | 880                       | 5    | 399                | 850  | 11                   | 403 | 16.2 | 823  | 117.0 |
| 9           | -                                | -                         | -                                | 9                         | 409                              | 878                       | 7    | 410                | 800  | 16                   | 410 | 19.7 | 888  | 173.7 |
| 10          | -                                | -                         | -                                | 4                         | 420                              | 838                       | 25   | 419                | 820  | 29                   | 419 | 23.2 | 909  | 166.5 |
| 11          | -                                | -                         | -                                | 17                        | 414                              | 897                       | 39   | 421                | 932  | 55                   | 419 | 16.1 | 921  | 101.7 |
| 12          | -                                | -                         | -                                | 32                        | 422                              | 947                       | 43   | 435                | 1066 | 75                   | 430 | 22.9 | 1015 | 185.9 |
| 13          | -                                | -                         | -                                | 35                        | 427                              | 1004                      | 43   | 443                | 1095 | 78                   | 435 | 27.8 | 1054 | 226.7 |
| 14          | -                                | -                         | -                                | 21                        | 433                              | 1045                      | 21   | 438                | 1088 | 42                   | 435 | 23.5 | 1065 | 192.7 |
| 15          | -                                | -                         | -                                | 17                        | 453                              | 1174                      | 7    | 470                | 1286 | 24                   | 458 | 23.3 | 1206 | 177.1 |
| 16          | -                                | -                         | -                                | 10                        | 471                              | 1260                      | 4    | 487                | 1150 | 14                   | 487 | 24.0 | 1229 | 212.8 |
| 17          | -                                | -                         | -                                | 8                         | 492                              | 1444                      | 4    | 464                | 1325 | 12                   | 483 | 32.9 | 1404 | 289.6 |
| 18          | -                                | -                         | -                                | 2                         | 506                              | 1800                      | 1    | 514                | 1600 | 3                    | 508 | 58.7 | 1733 | 660.2 |
| 20          | -                                | -                         | -                                | 1                         | 521                              | 1950                      | -    | -                  | -    | 1                    | 521 | -    | 1950 | -     |
| 21          | -                                | -                         | -                                | -                         | -                                | -                         | 1    | 558                | 2300 | 1                    | 558 | -    | 2300 | -     |
| TOTAL       | -                                | -                         | -                                | 163                       | 433                              | 1036                      | 200  | 434                | 1042 | 383                  | 433 | 30.8 | 1039 | 248.8 |
| MEAN AGE    | -                                | -                         | -                                | 12.9                      |                                  |                           | 12.1 |                    |      | 12.5                 |     |      |      |       |

Table 38. Length composition of whitefish for all areas combined from Great Slave Lake commercial fishery, 1983.

| LENGTH<br>INTERVAL<br>(mm) | NO. | %           | FORK LENGTH(mm) |     | DRESSED WEIGHT (g) |              |
|----------------------------|-----|-------------|-----------------|-----|--------------------|--------------|
|                            |     |             | MEAN            | SD. | MEAN               | SD.          |
| 310-319                    | 2   | -           | 315             | 3.5 | 400                | 0.0          |
| 320-329                    | 7   | 0.3         | 324             | 2.5 | 443                | 45.0         |
| 330-339                    | 13  | 0.5         | 333             | 3.3 | 488                | 36.3         |
| 340-349                    | 20  | 0.7         | 344             | 2.5 | 510                | 55.3         |
| 350-359                    | 18  | 0.7         | 355             | 2.6 | 508                | 46.2         |
| 360-369                    | 47  | 1.7         | 364             | 2.2 | 544                | 61.3         |
| 370-379                    | 83  | 3.0         | 374             | 3.0 | 587                | 57.3         |
| 380-389                    | 168 | 6.2         | 385             | 2.7 | 780                | 67.7         |
| 390-399                    | 245 | 9.0         | 394             | 2.8 | 809                | 66.8         |
| 400-409                    | 371 | 13.6        | 404             | 2.9 | 870                | 75.5         |
| 410-419                    | 337 | 12.4        | 414             | 2.8 | 923                | 78.6         |
| 420-429                    | 387 | 14.2        | 424             | 2.9 | 976                | 89.0         |
| 430-439                    | 258 | 8.5         | 434             | 2.8 | 1052               | 84.2         |
| 440-449                    | 220 | 8.1         | 444             | 2.8 | 1107               | 114.9        |
| 450-459                    | 164 | 6.0         | 454             | 2.7 | 1183               | 119.8        |
| 460-469                    | 130 | 4.8         | 464             | 2.7 | 1285               | 169.9        |
| 470-479                    | 89  | 3.3         | 474             | 2.9 | 1362               | 127.7        |
| 480-489                    | 55  | 2.0         | 484             | 3.0 | 1440               | 205.8        |
| 490-499                    | 36  | 1.3         | 494             | 2.8 | 1438               | 216.6        |
| 500-509                    | 32  | 1.2         | 503             | 2.3 | 1647               | 206.3        |
| 510-519                    | 17  | 0.6         | 515             | 3.0 | 1653               | 246.5        |
| 520-529                    | 10  | 0.4         | 524             | 2.6 | 1830               | 171.9        |
| 530-539                    | 8   | 0.3         | 538             | 1.9 | 1988               | 294.9        |
| 540-549                    | 1   | -           | 540             | -   | 2000               | -            |
| 550-559                    | 2   | -           | 559             | 0.7 | 2225               | 106.1        |
| 560-569                    | 2   | -           | 564             | 0.0 | 2400               | 70.7         |
| 570-579                    | 1   | -           | 578             | -   | 2500               | -            |
| 600-609                    | 1   | -           | 601             | -   | 3100               | -            |
| 610-619                    | 1   | -           | 613             | -   | 2800               | -            |
| 620-629                    | 1   | -           | 623             | -   | 3200               | -            |
| 640-649                    | 1   | -           | 648             | -   | 3600               | -            |
| <b>TOTAL</b>               |     | <b>2727</b> |                 |     | <b>423</b>         | <b>35.0</b>  |
| <b>MEAN</b>                |     |             |                 |     | <b>1000</b>        | <b>289.1</b> |

Table 39. Length composition of commercial whitefish for each seasonal period from Area Iw, 1983.

Table 40. Length composition of commercial whitefish for each seasonal period from Area 12, 1982.

| LENGTH<br>INTERVAL<br>(mm) | WINTER       |      | SPRING       |      | FALL         |      | NO. | TOTAL              |      | DRESSED |           |      |
|----------------------------|--------------|------|--------------|------|--------------|------|-----|--------------------|------|---------|-----------|------|
|                            | MEAN         | MEAN | MEAN         | MEAN | MEAN         | MEAN |     | FORK<br>LENGTH(mm) | MEAN | SD.     | WEIGHT(g) | MEAN |
|                            | FORK<br>LEN. | DR.  | FORK<br>LEN. | DR.  | FORK<br>LEN. | DR.  |     | MEAN               | SD.  | MEAN    | SD.       |      |
| NO. (mm)                   | (mm)         | (g)  | NO. (mm)     | (g)  | NO. (mm)     | (g)  | NO. | MEAN               | SD.  | MEAN    | SD.       |      |
| 340-349                    | 1            | 342  | 450          | 1    | 344          | 450  | -   | -                  | -    | 2       | 343       | 1.4  |
| 350-359                    | 1            | 358  | 600          | 1    | 358          | 600  | -   | -                  | -    | 2       | 358       | 0.0  |
| 360-369                    | 2            | 365  | 625          | 2    | 361          | 725  | 4   | 365                | 688  | 8       | 364       | 2.5  |
| 370-379                    | 8            | 373  | 563          | 9    | 374          | 678  | 2   | 372                | 675  | 19      | 374       | 2.8  |
| 380-389                    | 15           | 385  | 747          | 10   | 384          | 770  | 13  | 384                | 765  | 38      | 384       | 2.6  |
| 390-399                    | 36           | 394  | 797          | 11   | 398          | 814  | 15  | 395                | 847  | 62      | 395       | 2.7  |
| 400-409                    | 37           | 404  | 874          | 31   | 405          | 861  | 36  | 404                | 817  | 104     | 404       | 2.9  |
| 410-419                    | 28           | 414  | 930          | 20   | 415          | 938  | 29  | 415                | 990  | 77      | 414       | 3.0  |
| 420-429                    | 33           | 424  | 962          | 31   | 424          | 981  | 44  | 424                | 1024 | 108     | 424       | 3.0  |
| 430-439                    | 18           | 434  | 1039         | 23   | 434          | 1048 | 29  | 433                | 1102 | 70      | 434       | 2.9  |
| 440-449                    | 20           | 442  | 1140         | 17   | 445          | 1171 | 18  | 443                | 1158 | 55      | 443       | 2.7  |
| 450-459                    | 3            | 455  | 1083         | 14   | 455          | 1268 | 11  | 452                | 1250 | 28      | 454       | 2.7  |
| 460-469                    | 7            | 483  | 1207         | 13   | 463          | 1500 | 5   | 463                | 1360 | 25      | 463       | 2.4  |
| 470-479                    | 1            | 470  | 1500         | 10   | 474          | 1485 | 3   | 471                | 1567 | 14      | 473       | 2.4  |
| 480-489                    | -            | -    | -            | 5    | 484          | 1500 | -   | -                  | -    | 6       | 484       | 3.2  |
| 490-499                    | -            | -    | -            | 3    | 493          | 1417 | -   | -                  | -    | 3       | 493       | 1.0  |
| 500-509                    | -            | -    | -            | 5    | 502          | 1790 | -   | -                  | -    | 5       | 502       | 0.9  |
| 510-519                    | -            | -    | -            | 1    | 513          | 1000 | 1   | 517                | 1300 | 2       | 515       | 2.8  |
| 530-539                    | -            | -    | -            | 1    | 537          | 2500 | -   | -                  | -    | 1       | 537       | -    |
| TOTAL                      | 210          |      | 209          | 429  | 1068         |      | 210 | 420                | 1014 | 629     | 420       | 27.5 |
| MEAN                       | 413          | 916  | 429          | 1068 |              |      |     |                    |      | 998     | 238.4     |      |

Table 41. Length composition of commercial whitefish for each seasonal period from Area II, 1963.

Table 42. Length composition of commercial whitefish for each seasonal period from Area III, 1983.

Table 43. Length composition of commercial whitefish for each seasonal period from Area IV, 1983

| LENGTH<br>INTERVAL<br>(MM) | WINTER |     |      | SPRING |      |      | FALL |     |      | TOTAL              |      |                      |      |       |       |
|----------------------------|--------|-----|------|--------|------|------|------|-----|------|--------------------|------|----------------------|------|-------|-------|
|                            | MEAN   |     | MEAN | MEAN   |      | MEAN | MEAN |     | MEAN | FORK<br>LENGTH(MM) |      | DRESSED<br>WEIGHT(G) |      |       |       |
|                            | FORK   | DR. | LEN. | WT.    | FORK | DR.  | LEN. | WT. | FORK | DR.                | MEAN | SD.                  |      |       |       |
| NO.                        | (MM)   | (G) | NO.  | (MM)   | (G)  | NO.  | (MM) | (G) | NO.  | (MM)               | MEAN | SD.                  |      |       |       |
| 310-319                    | 2      | 315 | 400  | -      | -    | -    | -    | -   | 2    | 315                | 3.5  | 400                  | 0.0  |       |       |
| 320-329                    | 4      | 322 | 438  | -      | -    | -    | 1    | 324 | 400  | 5                  | 322  | 1.5                  | 430  | 44.7  |       |
| 330-339                    | 11     | 333 | 491  | -      | -    | -    | 2    | 332 | 475  | 13                 | 333  | 3.3                  | 488  | 36.3  |       |
| 340-349                    | 8      | 344 | 544  | -      | -    | -    | 3    | 343 | 467  | 11                 | 343  | 2.8                  | 523  | 56.4  |       |
| 350-359                    | 4      | 356 | 600  | -      | -    | -    | 2    | 354 | 575  | 6                  | 355  | 2.5                  | 592  | 37.6  |       |
| 360-369                    | 14     | 363 | 636  | 1      | 368  | 700  | 3    | 363 | 633  | 18                 | 364  | 1.7                  | 639  | 36.6  |       |
| 370-379                    | 21     | 374 | 693  | -      | -    | -    | 10   | 373 | 685  | 31                 | 374  | 2.8                  | 690  | 53.6  |       |
| 380-389                    | 28     | 384 | 750  | -      | -    | -    | 11   | 386 | 773  | 39                 | 385  | 2.8                  | 756  | 51.5  |       |
| 390-399                    | 22     | 394 | 800  | 4      | 394  | 725  | 39   | 394 | 797  | 65                 | 394  | 2.8                  | 794  | 59.6  |       |
| 400-409                    | 25     | 403 | 818  | 6      | 404  | 858  | 36   | 404 | 844  | 67                 | 404  | 3.0                  | 836  | 60.8  |       |
| 410-419                    | 21     | 414 | 895  | 14     | 415  | 918  | 37   | 414 | 901  | 72                 | 414  | 2.7                  | 903  | 70.2  |       |
| 420-429                    | 17     | 424 | 953  | 26     | 424  | 944  | 33   | 424 | 1002 | 78                 | 424  | 2.9                  | 971  | 80.9  |       |
| 430-439                    | 11     | 434 | 1009 | 17     | 434  | 1038 | 15   | 434 | 1050 | 43                 | 434  | 2.7                  | 1035 | 78.3  |       |
| 440-449                    | 10     | 443 | 1055 | 29     | 445  | 1047 | 8    | 444 | 1069 | 47                 | 444  | 3.0                  | 1052 | 80.1  |       |
| 450-459                    | 5      | 453 | 1170 | 24     | 454  | 1133 | 3    | 455 | 1267 | 32                 | 454  | 2.4                  | 1152 | 105.1 |       |
| 460-469                    | 1      | 460 | 1250 | 19     | 463  | 1197 | 2    | 464 | 1225 | 22                 | 463  | 2.6                  | 1202 | 110.7 |       |
| 470-479                    | 2      | 472 | 1325 | 23     | 475  | 1257 | 2    | 471 | 1300 | 27                 | 475  | 3.1                  | 1265 | 84.6  |       |
| 480-489                    | 1      | 488 | 1300 | 9      | 484  | 1411 | 1    | 488 | 1650 | 11                 | 484  | 3.0                  | 1423 | 160.3 |       |
| 490-499                    | 1      | 493 | 1650 | 8      | 493  | 1394 | 1    | 498 | 1500 | 10                 | 494  | 3.6                  | 1430 | 120.6 |       |
| 500-509                    | 1      | 503 | 1550 | 11     | 504  | 1536 | -    | -   | -    | 12                 | 504  | 2.4                  | 1538 | 185.3 |       |
| 510-519                    | 1      | 518 | 1750 | 5      | 514  | 1640 | -    | -   | -    | 6                  | 515  | 3.0                  | 1658 | 153.0 |       |
| 520-529                    | -      | -   | -    | 4      | 525  | 1888 | -    | -   | -    | 4                  | 525  | 2.9                  | 1888 | 170.2 |       |
| 530-539                    | -      | -   | -    | 1      | 534  | 2250 | 1    | 538 | 2050 | 2                  | 536  | 2.8                  | 2150 | 141.4 |       |
| 540-549                    | -      | -   | -    | 1      | 540  | 2000 | -    | -   | -    | 1                  | 540  | -                    | 2000 | -     |       |
| 570-579                    | -      | -   | -    | 1      | 578  | 2500 | -    | -   | -    | 1                  | 578  | -                    | 2500 | -     |       |
| 600-609                    | -      | -   | -    | 1      | 601  | 3100 | -    | -   | -    | 1                  | 601  | -                    | 3100 | -     |       |
| 610-619                    | -      | -   | -    | 1      | 613  | 2800 | -    | -   | -    | 1                  | 613  | -                    | 2800 | -     |       |
| 620-629                    | -      | -   | -    | 1      | 623  | 3200 | -    | -   | -    | 1                  | 623  | -                    | 3200 | -     |       |
| 640-649                    | -      | -   | -    | 1      | 648  | 3800 | -    | -   | -    | 1                  | 648  | -                    | 3800 | -     |       |
| TOTAL                      |        | 210 |      | 207    |      | 210  |      | 210 |      | 627                |      | 420                  | 43.9 | 987   | 327.7 |
| MEAN                       |        | 395 | 809  |        | 458  | 1203 |      | 408 | 892  |                    |      |                      |      |       |       |

Table 44. Length composition of commercial whitefish for each seasonal period from Area V, 1983.

| LENGTH<br>INTERVAL<br>(MM) | WINTER       |             | SPRING           |              | FALL        |                  | NO. | TOTAL |     |                      |
|----------------------------|--------------|-------------|------------------|--------------|-------------|------------------|-----|-------|-----|----------------------|
|                            | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK DR. | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK DR. |     | MEAN  | SD. | DRESSED<br>WEIGHT(G) |
|                            | NO. (MM)     | (G)         | NO. (MM)         | (G)          | NO. (MM)    | (G)              |     | MEAN  | SD. | MEAN                 |
| 340-349                    | -            | -           | 1 347            | 500          | 1 344       | 450              | 2   | 346   | 2.1 | 475                  |
| 360-369                    | -            | -           | -                | -            | 1 363       | 500              | 1   | 363   | -   | 500                  |
| 370-379                    | -            | -           | 1 379            | 750          | 1 378       | 650              | 2   | 379   | 0.7 | 700                  |
| 380-389                    | -            | -           | 7 384            | 707          | 8 384       | 720              | 12  | 384   | 2.4 | 713                  |
| 390-399                    | -            | -           | 14 395           | 829          | 11 396      | 800              | 28  | 395   | 2.1 | 816                  |
| 400-409                    | -            | -           | 25 405           | 836          | 15 405      | 857              | 40  | 405   | 2.7 | 844                  |
| 410-419                    | -            | -           | 28 416           | 909          | 24 414      | 910              | 52  | 415   | 2.7 | 910                  |
| 420-429                    | -            | -           | 37 424           | 955          | 43 424      | 959              | 80  | 424   | 2.9 | 958                  |
| 430-439                    | -            | -           | 19 434           | 985          | 27 433      | 1044             | 46  | 433   | 2.4 | 1024                 |
| 440-449                    | -            | -           | 16 445           | 1100         | 26 445      | 1077             | 42  | 445   | 2.8 | 1088                 |
| 450-459                    | -            | -           | 19 453           | 1188         | 23 454      | 1152             | 42  | 454   | 2.8 | 1155                 |
| 460-469                    | -            | -           | 15 464           | 1267         | 12 465      | 1267             | 27  | 465   | 2.3 | 1267                 |
| 470-479                    | -            | -           | 8 474            | 1369         | 10 474      | 1375             | 18  | 474   | 3.1 | 1372                 |
| 480-489                    | -            | -           | 6 485            | 1333         | 5 484       | 1410             | 11  | 484   | 2.4 | 1368                 |
| 490-499                    | -            | -           | 7 493            | 1400         | -           | -                | 7   | 493   | 3.0 | 1400                 |
| 500-509                    | -            | -           | 2 504            | 1525         | -           | -                | 2   | 504   | 4.2 | 1525                 |
| 510-519                    | -            | -           | 1 519            | 1600         | 2 514       | 1600             | 3   | 515   | 3.2 | 1600                 |
| 520-529                    | -            | -           | 1 521            | 1950         | 1 523       | 1900             | 2   | 522   | 1.4 | 1925                 |
| 530-539                    | -            | -           | 2 536            | 2000         | -           | -                | 2   | 536   | 2.8 | 2000                 |
| 550-559                    | -            | -           | -                | -            | 1 558       | 2300             | 1   | 558   | -   | 2300                 |
| 560-569                    | -            | -           | 1 564            | 2450         | 1 564       | 2350             | 2   | 564   | 0.0 | 2400                 |
| TOTAL                      | -            | -           | 210              | 434          | 1042        | 209              | 434 | 1045  | 419 | 434                  |
| MEAN                       | -            | -           | -                | -            | -           | -                | -   | -     | -   | 282.1                |

Table 45. Weight composition by market weight intervals for lake whitefish from commercial plant samples on Great Slave Lake, 1984.

| MARKET WEIGHT<br>INTERVAL<br>(DRESSED) | AREA I |     | AREA II |     | AREA III |     | AREA IV |     | AREA V |     | TOTAL<br>NO. | %   |
|--|--------|-----|---------|-----|----------|-----|---------|-----|--------|-----|--------------|-----|
|  | NO.    | %   | NO.     | %   | NO.      | %   | NO.     | %   | NO.    | %   |              |     |
| NO MARKET<br>(< 0.45 kg)               | 8      | 2   | -       | -   | 5        | -   | 1       | -   | 1      | -   | -            | -   |
| SMALL<br>(0.45-0.60 kg)                | 11     | 3   | 6       | 1   | 41       | 7   | 8       | 2   | 38     | 9   | 6            | 1   |
| MEDIUM<br>(0.70-1.39 kg)               | 321    | 77  | 326     | 78  | 504      | 80  | 383     | 82  | 353    | 84  | 381          | 91  |
| LARGE<br>(1.40-1.80 kg)                | 64     | 15  | 77      | 18  | 54       | 9   | 24      | 6   | 21     | 5   | 27           | 6   |
| JUMBO<br>(> 1.80 kg)                   | 14     | 3   | 11      | 3   | 24       | 4   | 2       | -   | 5      | 1   | 6            | 1   |
| TOTAL                                  | 418    | 100 | 420     | 100 | 638      | 100 | 418     | 100 | 418    | 100 | 420          | 100 |

Table 46. Age composition of whitefish for all areas combined from Great Slave Lake commercial fishery, 1984.

| AGE<br>(yr) | NO.  | %    | FORK LENGTH(mm) |      | DRESSED WEIGHT (G) |       |
|-------------|------|------|-----------------|------|--------------------|-------|
|             |      |      | MEAN            | SD.  | MEAN               | SD.   |
| 5           | 4    | 0.3  | 375             | 48.2 | 750                | 264.6 |
| 6           | 49   | 3.5  | 395             | 27.7 | 834                | 187.5 |
| 7           | 110  | 7.9  | 392             | 31.5 | 805                | 191.1 |
| 8           | 131  | 9.4  | 407             | 25.7 | 896                | 184.9 |
| 9           | 309  | 22.1 | 415             | 27.2 | 961                | 201.3 |
| 10          | 225  | 16.1 | 424             | 28.6 | 1028               | 230.4 |
| 11          | 183  | 13.1 | 429             | 25.6 | 1053               | 213.0 |
| 12          | 145  | 10.3 | 442             | 34.8 | 1142               | 316.8 |
| 13          | 108  | 7.7  | 448             | 31.4 | 1204               | 302.8 |
| 14          | 79   | 5.6  | 455             | 28.6 | 1282               | 279.9 |
| 15          | 37   | 2.6  | 473             | 39.5 | 1484               | 450.0 |
| 16          | 14   | 1.0  | 461             | 39.1 | 1296               | 291.2 |
| 17          | 6    | 0.4  | 487             | 33.7 | 1458               | 307.3 |
| 18          | 1    | -    | 508             | -    | 1700               | -     |
| TOTAL       | 1401 |      | 425             | 35.3 | 1035               | 284.5 |
| MEAN AGE    | 10.2 |      |                 |      |                    |       |

Table 47. Age composition of commercial whitefish for each seasonal period from Area IV, 1984.

| AGE<br>(yr) | WINTER       |             | SPRING       |             | FALL         |             | TOTAL        |                    | DRESSED      |                   |      |       |       |
|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|--------------------|--------------|-------------------|------|-------|-------|
|             | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK | MEAN<br>LENGTH(mm) | MEAN<br>FORK | MEAN<br>WEIGHT(g) |      |       |       |
|             | NO. (mm)     | (g)         | NO. (mm)     | (g)         | NO. (mm)     | (g)         | NO.          | SD.                | MEAN         | SD.               |      |       |       |
| 6           | 2            | 369         | 700          | 1           | 416          | 1000        | -            | -                  | 3            | 384               | 30.8 | 800   | 180.3 |
| 7           | 14           | 387         | 818          | 10          | 416          | 965         | -            | -                  | 24           | 399               | 21.5 | 879   | 146.6 |
| 8           | 21           | 406         | 910          | 8           | 439          | 1113        | -            | -                  | 29           | 415               | 22.5 | 966   | 155.3 |
| 9           | 19           | 415         | 988          | 13          | 452          | 1212        | -            | -                  | 32           | 430               | 20.1 | 1067  | 206.2 |
| 10          | 24           | 421         | 1017         | 16          | 458          | 1238        | -            | -                  | 40           | 436               | 27.2 | 1105  | 199.6 |
| 11          | 14           | 431         | 1111         | 17          | 449          | 1226        | -            | -                  | 31           | 441               | 26.1 | 1174  | 188.4 |
| 12          | 10           | 431         | 1115         | 15          | 481          | 1487        | -            | -                  | 25           | 461               | 42.4 | 1338  | 334.3 |
| 13          | 4            | 484         | 1550         | 16          | 468          | 1328        | -            | -                  | 20           | 471               | 18.5 | 1373  | 190.2 |
| 14          | 4            | 451         | 1275         | 6           | 482          | 1367        | -            | -                  | 10           | 469               | 25.9 | 1330  | 194.7 |
| 15          | 1            | 472         | 1450         | 6           | 502          | 1708        | -            | -                  | 7            | 488               | 26.0 | 1671  | 230.7 |
| 16          | 1            | 462         | 1500         | 4           | 505          | 1600        | -            | -                  | 5            | 497               | 23.7 | 1580  | 75.8  |
| 17          | -            | -           | -            | 2           | 518          | 1775        | -            | -                  | 2            | 518               | 4.2  | 1775  | 176.8 |
| TOTAL       | 114          |             | 114          |             | -            | -           | 228          |                    | 440          | 37.9              | 1156 | 285.4 |       |
| MEAN        |              | 418         | 1015         |             | 461          | 1297        |              |                    |              |                   |      |       |       |
| MEAN AGE    |              | 9.7         |              |             | 11.1         |             |              |                    | 10.4         |                   |      |       |       |

Table 48. Age composition of commercial whitefish for each seasonal period from Area 12, 1984.

| AGE<br>(yr) | WINTER       |             | SPRING              |              | FALL                |              | TOTAL               |                            |                              |      |      |       |       |
|-------------|--------------|-------------|---------------------|--------------|---------------------|--------------|---------------------|----------------------------|------------------------------|------|------|-------|-------|
|             | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK<br>DR. | MEAN<br>LEN. | MEAN<br>FORK<br>DR. | MEAN<br>LEN. | MEAN<br>FORK<br>DR. | FORK<br>LENGTH(mm)<br>MEAN | DRESSED<br>WEIGHT(g)<br>MEAN |      |      |       |       |
|             | NO. (mm)     | (g)         | NO. (mm)            | (g)          | NO. (mm)            | (g)          | NO.                 | SD.                        | SD.                          |      |      |       |       |
| 5           | -            | -           | -                   | -            | -                   | 1            | 313                 | 400                        | 1                            | 313  | -    | 400   | -     |
| 6           | -            | -           | 13                  | 410          | 927                 | 5            | 367                 | 640                        | 18                           | 398  | 26.7 | 847   | 205.1 |
| 7           | -            | -           | 3                   | 432          | 1067                | 14           | 378                 | 732                        | 17                           | 388  | 33.8 | 791   | 227.2 |
| 8           | -            | -           | 10                  | 437          | 1155                | 9            | 389                 | 767                        | 19                           | 414  | 31.9 | 971   | 256.8 |
| 9           | -            | -           | 15                  | 426          | 1080                | 34           | 420                 | 1022                       | 49                           | 422  | 23.5 | 1034  | 170.6 |
| 10          | -            | -           | 12                  | 433          | 1108                | 25           | 422                 | 1056                       | 37                           | 425  | 26.1 | 1073  | 197.4 |
| 11          | -            | -           | 13                  | 441          | 1163                | 5            | 436                 | 1200                       | 18                           | 440  | 23.4 | 1172  | 235.3 |
| 12          | -            | -           | 13                  | 471          | 1400                | 8            | 434                 | 1089                       | 21                           | 457  | 33.8 | 1274  | 289.7 |
| 13          | -            | -           | 5                   | 474          | 1517                | 3            | 459                 | 1350                       | 9                            | 469  | 18.5 | 1461  | 230.2 |
| 14          | -            | -           | 9                   | 480          | 1539                | 8            | 471                 | 1494                       | 17                           | 475  | 26.1 | 1518  | 283.9 |
| 15          | -            | -           | 7                   | 480          | 1550                | 3            | 502                 | 1767                       | 10                           | 487  | 17.9 | 1615  | 261.9 |
| TOTAL       | -            | -           | 101                 |              |                     | 115          |                     |                            | 216                          |      |      |       |       |
| MEAN        | -            | -           | 445                 | 1219         |                     | 418          | 1024                |                            | 431                          | 38.4 | 1115 | 319.0 |       |
| MEAN AGE    | -            | 10.3        |                     |              | 9.6                 |              |                     | 10.0                       |                              |      |      |       |       |

Table 49. Age composition of commercial whitefish for each seasonal period from Area II, 1954.

| AGE<br>(yr) | WINTER       |             |                     | SPRING       |             |                     | FALL         |             |                     | TOTAL              |      |                      |
|-------------|--------------|-------------|---------------------|--------------|-------------|---------------------|--------------|-------------|---------------------|--------------------|------|----------------------|
|             | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK<br>DR. | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK<br>DR. | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK<br>DR. | FORK<br>LENGTH(mm) | MEAN | DRESSED<br>WEIGHT(g) |
|             | NO.          | (mm)        | (g)                 | NO.          | (mm)        | (g)                 | NO.          | (mm)        | (g)                 | MEAN               | SD.  | MEAN                 |
| 5           | -            | -           | -                   | -            | -           | -                   | 3            | 395         | 867                 | 3                  | 395  | 26.1                 |
| 6           | 4            | 382         | 750                 | 2            | 369         | 700                 | 17           | 401         | 871                 | 23                 | 385  | 27.2                 |
| 7           | 26           | 375         | 679                 | 4            | 353         | 638                 | 29           | 410         | 900                 | 59                 | 381  | 33.9                 |
| 8           | 15           | 385         | 770                 | 21           | 401         | 836                 | 17           | 422         | 979                 | 53                 | 403  | 25.5                 |
| 9           | 26           | 406         | 848                 | 33           | 407         | 923                 | 19           | 431         | 1037                | 78                 | 412  | 26.9                 |
| 10          | 15           | 411         | 883                 | 16           | 430         | 1084                | 15           | 449         | 1223                | 46                 | 430  | 34.0                 |
| 11          | 11           | 426         | 1005                | 15           | 432         | 1057                | 8            | 434         | 1050                | 34                 | 430  | 25.5                 |
| 12          | 4            | 433         | 1050                | 7            | 475         | 1486                | 4            | 464         | 1313                | 15                 | 461  | 35.8                 |
| 13          | 3            | 446         | 1183                | 6            | 462         | 1400                | 3            | 476         | 1450                | 12                 | 461  | 38.0                 |
| 14          | -            | -           | -                   | 1            | 471         | 1350                | -            | -           | -                   | 1                  | 471  | -                    |
| 15          | -            | -           | -                   | 1            | 486         | 1450                | -            | -           | -                   | 1                  | 486  | -                    |
| 16          | -            | -           | -                   | 1            | 506         | 1700                | -            | -           | -                   | 1                  | 506  | -                    |
| TOTAL       | 104          |             |                     | 107          |             |                     | 115          |             |                     | 326                |      |                      |
| MEAN        | 389          | 830         |                     | 420          | 1015        |                     | 424          | 1010        |                     | 415                | 35.8 | 954                  |
| MEAN AGE    | 8.8          |             |                     | 8.7          |             |                     | 8.3          |             |                     | 8.9                |      | 270.6                |

Table 50. Age composition of commercial whitefish for each seasonal period from Area III, 1984.

| AGE<br>(yr) | WINTER       |             | SPRING              |              | FALL        |                     | TOTAL              |             |                      |
|-------------|--------------|-------------|---------------------|--------------|-------------|---------------------|--------------------|-------------|----------------------|
|             | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK<br>DR. | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK<br>DR. | FORK<br>LENGTH(mm) |             | DRESSED<br>WEIGHT(g) |
|             | NO. (mm)     | (g)         | NO. (mm)            | (g)          | NO. (mm)    | (g)                 | NO.                | MEAN<br>SD. | MEAN<br>SD.          |
| 7           | -            | -           | 5                   | 365          | 620         | -                   | -                  | 5           | 365 25.5 620 103.7   |
| 8           | -            | -           | 6                   | 384          | 775         | 4                   | 409 925            | 10          | 394 21.8 835 123.6   |
| 9           | -            | -           | 17                  | 409          | 944         | 62                  | 419 1018           | 79          | 417 19.6 1002 151.6  |
| 10          | -            | -           | 17                  | 410          | 928         | 24                  | 419 1021           | 41          | 415 20.0 992 155.2   |
| 11          | -            | -           | 31                  | 421          | 1023        | 6                   | 421 992            | 37          | 421 20.8 1018 160.0  |
| 12          | -            | -           | 13                  | 416          | 946         | 8                   | 455 1342           | 19          | 428 27.9 1071 273.0  |
| 13          | -            | -           | 15                  | 422          | 1000        | 4                   | 448 1388           | 20          | 427 20.8 1078 230.8  |
| 14          | -            | -           | 9                   | 429          | 1100        | 7                   | 463 1479           | 16          | 444 31.0 1268 312.4  |
| 15          | -            | -           | 3                   | 456          | 1183        | 2                   | 485 1500           | 5           | 460 24.4 1310 235.8  |
| 16          | -            | -           | 1                   | 477          | 1500        | -                   | -                  | 1           | 477 - 1500 -         |
| 17          | -            | -           | -                   | -            | -           | 1                   | 486 1500           | 1           | 486 - 1500 -         |
| TOTAL       | -            | -           | 118                 | 415          | 970         | 116                 | 426 1084           | 234         | 420 26.0 1026 218.0  |
| MEAN        | -            | -           |                     |              |             |                     |                    |             |                      |
| MEAN AGE    | -            | -           | 11.0                | 11.0         | 10.0        | 10.0                | 10.5               | 10.5        | 10.5 218.0           |

Table 51. Age composition of commercial whitefish for each seasonal period from Area IV, 1984.

| AGE<br>(yr) | WINTER       |             | SPRING       |             | FALL         |             | TOTAL              |      |                      |     |      |      |       |
|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------------|------|----------------------|-----|------|------|-------|
|             | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>LEN. | MEAN<br>WT. | FORK<br>LENGTH(mm) | MEAN | DRESSED<br>WEIGHT(g) |     |      |      |       |
|             | NO.          | (mm)        | NO.          | (mm)        | NO.          | (g)         | NO.                | SD.  | MEAN                 | SD. |      |      |       |
| 5           | -            | -           | 3            | 389         | 750          | 1           | 400                | 800  | 4                    | 392 | 44.2 | 783  | 217.5 |
| 7           | -            | -           | 8            | 406         | 820          | -           | -                  | -    | 8                    | 406 | 30.6 | 920  | 168.1 |
| 8           | -            | -           | 9            | 417         | 922          | 7           | 392                | 743  | 15                   | 406 | 25.4 | 844  | 179.2 |
| 9           | -            | -           | 21           | 428         | 1050         | 36          | 388                | 718  | 57                   | 403 | 32.8 | 840  | 233.2 |
| 10          | -            | -           | 21           | 437         | 1119         | 24          | 400                | 785  | 45                   | 417 | 30.8 | 941  | 243.9 |
| 11          | -            | -           | 15           | 436         | 1117         | 15          | 417                | 887  | 30                   | 427 | 29.1 | 1002 | 219.5 |
| 12          | -            | -           | 4            | 447         | 1238         | 13          | 416                | 908  | 17                   | 423 | 30.8 | 985  | 311.1 |
| 13          | -            | -           | 3            | 510         | 1767         | 9           | 419                | 953  | 12                   | 443 | 44.5 | 1142 | 417.2 |
| 14          | -            | -           | 1            | 449         | 1150         | 3           | 453                | 1167 | 4                    | 452 | 6.2  | 1163 | 85.4  |
| TOTAL       | -            | -           | 82           | 432         | 1084         | 108         | 403                | 812  | 190                  | 415 | 33.7 | 929  | 282.9 |
| MEAN        |              |             |              |             |              |             |                    |      |                      |     |      |      |       |
| MEAN AGE    | -            |             | 9.6          |             |              | 10.2        |                    |      | 10.0                 |     |      |      |       |

Table 52. Age composition of commercial whitefish for each seasonal period from Area V, 1984.

| AGE<br>(yr) | WINTER       |             | SPRING               |             | FALL         |             | TOTAL                |             |            |
|-------------|--------------|-------------|----------------------|-------------|--------------|-------------|----------------------|-------------|------------|
|             | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK<br>LEN. | MEAN<br>DR. | MEAN<br>LEN. | MEAN<br>WT. | MEAN<br>FORK<br>LEN. | MEAN<br>DR. | LENGTH(mm) |
|             | NO. (mm)     | (g)         | NO. (mm)             | (g)         | NO. (mm)     | (g)         | NO.                  | MEAN        | SD.        |
| 6           | -            | -           | 1                    | 407         | 950          | -           | -                    | -           | 950        |
| 8           | -            | -           | 2                    | 413         | 900          | 2           | 403                  | 750         | 825        |
| 9           | -            | -           | 10                   | 416         | 975          | 4           | 396                  | 813         | 939        |
| 10          | -            | -           | 7                    | 428         | 1036         | 9           | 417                  | 944         | 1030       |
| 11          | -            | -           | 13                   | 428         | 1042         | 20          | 420                  | 923         | 1041       |
| 12          | -            | -           | 21                   | 440         | 1088         | 27          | 426                  | 948         | 1099       |
| 13          | -            | -           | 16                   | 448         | 1151         | 19          | 429                  | 1000        | 1083       |
| 14          | -            | -           | 11                   | 453         | 1164         | 20          | 439                  | 1078        | 1108       |
| 15          | -            | -           | 8                    | 465         | 1663         | 6           | 414                  | 958         | 1361       |
| 16          | -            | -           | 3                    | 455         | 1233         | 5           | 426                  | 1010        | 1094       |
| 17          | -            | -           | 2                    | 458         | 1150         | 1           | 483                  | 1400        | 1233       |
| TOTAL       | -            | -           | 94                   | 441         | 1140         | 113         | 426                  | 974         | 207        |
| MEAN        | -            | -           |                      |             |              |             |                      |             | 29.7       |
| MEAN AGE    | -            | -           |                      | 12.1        |              | 12.4        |                      | 12.3        | 1048       |

Table 53. Length composition of whitefish for all Areas combined from Great Slave Lake commercial fishery, 1984.

| LENGTH<br>INTERVAL<br>(mm) | NO.  | %    | FORK LENGTH (mm) |      | DRESSED WEIGHT (g) |       |
|----------------------------|------|------|------------------|------|--------------------|-------|
|                            |      |      | MEAN             | SD.  | MEAN               | SD.   |
| 310-319                    | 4    | 0.1  | 315              | 2.8  | 400                | 40.8  |
| 320-329                    | 3    | 0.1  | 325              | 3.1  | 433                | 28.9  |
| 330-339                    | 5    | 0.2  | 334              | 3.9  | 458                | 58.5  |
| 340-349                    | 14   | 0.5  | 344              | 2.7  | 511                | 65.6  |
| 350-359                    | 20   | 0.7  | 354              | 2.8  | 588                | 53.5  |
| 360-369                    | 35   | 1.3  | 365              | 3.1  | 635                | 42.8  |
| 370-379                    | 87   | 3.2  | 374              | 2.8  | 708                | 97.9  |
| 380-389                    | 138  | 5.1  | 384              | 2.8  | 763                | 70.8  |
| 390-399                    | 214  | 7.9  | 394              | 3.0  | 820                | 76.9  |
| 400-409                    | 335  | 12.3 | 404              | 2.9  | 878                | 77.5  |
| 410-419                    | 372  | 13.7 | 414              | 2.9  | 944                | 82.4  |
| 420-429                    | 338  | 12.4 | 424              | 2.9  | 992                | 91.0  |
| 430-439                    | 280  | 10.3 | 434              | 2.8  | 1061               | 92.5  |
| 440-449                    | 231  | 8.5  | 444              | 2.9  | 1149               | 108.0 |
| 450-459                    | 171  | 6.3  | 454              | 2.7  | 1208               | 122.9 |
| 460-469                    | 157  | 5.8  | 464              | 2.8  | 1312               | 120.7 |
| 470-479                    | 89   | 3.3  | 474              | 2.9  | 1419               | 116.1 |
| 480-489                    | 73   | 2.7  | 484              | 2.5  | 1510               | 151.4 |
| 490-499                    | 58   | 2.1  | 494              | 2.7  | 1606               | 160.3 |
| 500-509                    | 35   | 1.3  | 504              | 3.2  | 1784               | 195.8 |
| 510-519                    | 22   | 0.8  | 514              | 2.8  | 1832               | 152.4 |
| 520-529                    | 20   | 0.7  | 524              | 3.2  | 1943               | 289.6 |
| 530-539                    | 5    | 0.2  | 534              | 3.9  | 1920               | 125.5 |
| 540-549                    | 5    | 0.2  | 544              | 4.0  | 2390               | 307.0 |
| 550-559                    | 7    | 0.3  | 553              | 3.4  | 2343               | 359.9 |
| 560-569                    | 1    | -    | 560              | -    | 2350               | -     |
| 580-589                    | 1    | -    | 589              | -    | 2850               | -     |
| TOTAL                      | 2722 |      |                  |      |                    |       |
| MEAN                       |      |      | 427              | 35.5 | 1051               | 295.1 |

Table 54. Length composition of commercial whitefish for each seasonal period from Area Iw, 1954

| LENGTH<br>INTERVAL<br>(mm) | WINTER         |              | SPRING         |              | FALL           |              | TOTAL                      |                              |       |
|----------------------------|----------------|--------------|----------------|--------------|----------------|--------------|----------------------------|------------------------------|-------|
|                            | MEAN<br>NO.    | MEAN<br>(mm) | MEAN<br>NO.    | MEAN<br>(mm) | MEAN<br>NO.    | MEAN<br>(mm) | FORK<br>LENGTH(mm)<br>MEAN | DRESSED<br>WEIGHT(g)<br>MEAN |       |
|                            | LENGTH<br>LEN. | WT.<br>(g)   | LENGTH<br>LEN. | WT.<br>(g)   | LENGTH<br>LEN. | WT.<br>(g)   | SD.                        | SD.                          |       |
| 550-559                    | 1              | 355          | 650            | -            | -              | -            | -                          | -                            | 650   |
| 360-369                    | 5              | 366          | 640            | -            | -              | -            | -                          | -                            | 643   |
| 710-739                    | 7              | 373          | 743            | 1            | 378            | 800          | -                          | -                            | 750   |
| 380-389                    | 19             | 385          | 813            | -            | -              | -            | -                          | -                            | 813   |
| 390-399                    | 23             | 395          | 863            | 5            | 395            | 850          | -                          | -                            | 861   |
| 400-409                    | 25             | 404          | 904            | 11           | 403            | 888          | -                          | -                            | 893   |
| 410-419                    | 47             | 414          | 978            | 9            | 415            | 972          | -                          | -                            | 977   |
| 420-429                    | 18             | 423          | 1028           | 17           | 424            | 1015         | -                          | -                            | 1021  |
| 430-439                    | 25             | 435          | 1090           | 16           | 435            | 1088         | -                          | -                            | 1089  |
| 440-449                    | 13             | 444          | 1208           | 21           | 444            | 1183         | -                          | -                            | 1193  |
| 450-459                    | 9              | 453          | 1267           | 21           | 455            | 1236         | -                          | -                            | 1245  |
| 460-469                    | 7              | 463          | 1393           | 29           | 464            | 1326         | -                          | -                            | 1339  |
| 470-479                    | 5              | 472          | 1480           | 30           | 474            | 1403         | -                          | -                            | 1414  |
| 480-489                    | 2              | 484          | 1475           | 14           | 483            | 1482         | -                          | -                            | 1481  |
| 490-499                    | 3              | 496          | 1667           | 14           | 494            | 1532         | -                          | -                            | 1556  |
| 500-509                    | -              | -            | 6              | 504          | 1667           | -            | -                          | -                            | 1722  |
| 510-519                    | 1              | 512          | 1800           | 7            | 515            | 1800         | -                          | -                            | 1800  |
| 520-529                    | -              | -            | 6              | 524          | 1800           | -            | -                          | -                            | 1800  |
| 530-539                    | -              | -            | 1              | 539          | 1850           | -            | -                          | -                            | 1850  |
| 540-549                    | -              | -            | 1              | 548          | 2000           | -            | -                          | -                            | 2000  |
| 550-559                    | -              | -            | 1              | 557          | 2150           | -            | -                          | -                            | 2150  |
| TOTAL                      | 210            | 417          | 1013           | 210          | 459            | 1290         | -                          | -                            | 420   |
| MEAN                       | 210            | 417          | 1013           | 210          | 459            | 1290         | -                          | -                            | 420   |
|                            |                |              |                |              |                |              | 37.1                       | 1151                         | 284.1 |

Table 55. Length composition of commercial whitefish for each seasonal period from Area IE, 1984.

| LENGTH<br>INTERVAL<br>(mm) | WINTER |                      |                    | SPRING |                      |                    | FALL |                      |                    | TOTAL |                            |                      |       |
|----------------------------|--------|----------------------|--------------------|--------|----------------------|--------------------|------|----------------------|--------------------|-------|----------------------------|----------------------|-------|
|                            | NO.    | MEAN<br>LEN.<br>(mm) | MEAN<br>WT.<br>(g) | NO.    | MEAN<br>LEN.<br>(mm) | MEAN<br>WT.<br>(g) | NO.  | MEAN<br>LEN.<br>(mm) | MEAN<br>WT.<br>(g) | NO.   | MEAN<br>FORK<br>LENGTH(mm) | DRESSED<br>WEIGHT(g) |       |
|                            |        |                      |                    |        |                      |                    |      |                      |                    | MEAN  | SD.                        |                      |       |
| 310-319                    | -      | -                    | -                  | -      | -                    | -                  | 2    | 316                  | 375                | 2     | 316                        | 35.4                 |       |
| 320-329                    | -      | -                    | -                  | -      | -                    | -                  | 1    | 328                  | 400                | -     | 328                        | -                    |       |
| 330-339                    | -      | -                    | -                  | -      | -                    | -                  | 2    | 334                  | 400                | 2     | 334                        | 5.7                  |       |
| 340-349                    | -      | -                    | -                  | -      | -                    | -                  | 5    | 345                  | 460                | 5     | 345                        | 3.7                  |       |
| 350-359                    | -      | -                    | -                  | -      | -                    | -                  | 3    | 354                  | 583                | 3     | 354                        | 2.6                  |       |
| 360-369                    | -      | -                    | -                  | -      | -                    | -                  | 3    | 364                  | 633                | 3     | 364                        | 0.6                  |       |
| 370-379                    | -      | -                    | -                  | -      | -                    | -                  | 8    | 373                  | 683                | 8     | 373                        | 2.2                  |       |
| 380-389                    | -      | -                    | -                  | -      | -                    | -                  | 9    | 385                  | 787                | 9     | 385                        | 2.4                  |       |
| 390-399                    | 9      | 395                  | 881                | 18     | 394                  | 839                | 27   | 394                  | 2.9                | 9     | 394                        | 77.1                 |       |
| 400-409                    | 13     | 405                  | 942                | 22     | 405                  | 900                | 35   | 405                  | 2.8                | 13    | 405                        | 84.7                 |       |
| 410-419                    | 18     | 415                  | 958                | 26     | 414                  | 971                | 46   | 415                  | 2.8                | 18    | 415                        | 75.3                 |       |
| 420-429                    | 27     | 425                  | 1037               | 33     | 424                  | 1042               | 60   | 424                  | 2.8                | 27    | 424                        | 75.2                 |       |
| 430-439                    | 17     | 434                  | 1106               | 25     | 434                  | 1112               | 42   | 434                  | 2.3                | 17    | 434                        | 98.3                 |       |
| 440-449                    | 24     | 444                  | 1185               | 17     | 443                  | 1188               | 41   | 444                  | 2.5                | 24    | 444                        | 92.9                 |       |
| 450-459                    | 22     | 454                  | 1292               | 14     | 454                  | 1275               | 36   | 454                  | 2.7                | 22    | 454                        | 88.7                 |       |
| 460-469                    | 24     | 464                  | 1346               | 7      | 464                  | 1379               | 31   | 464                  | 2.7                | 24    | 464                        | 134.3                |       |
| 470-479                    | 11     | 475                  | 1486               | 4      | 473                  | 1475               | 15   | 475                  | 2.7                | 11    | 475                        | 109.7                |       |
| 480-489                    | 18     | 485                  | 1587               | 1      | 483                  | 1650               | 19   | 485                  | 2.8                | 18    | 485                        | 157.8                |       |
| 490-499                    | 10     | 494                  | 1685               | 4      | 494                  | 1688               | 14   | 494                  | 2.5                | 10    | 494                        | 147.3                |       |
| 500-509                    | 7      | 504                  | 1814               | 2      | 505                  | 1975               | 9    | 504                  | 3.1                | 7     | 504                        | 196.9                |       |
| 510-519                    | 5      | 514                  | 1830               | -      | -                    | -                  | 5    | 514                  | 3.8                | 5     | 514                        | 175.4                |       |
| 520-529                    | 1      | 520                  | 1350               | 2      | 522                  | 2000               | 3    | 521                  | 1.7                | 1     | 522                        | -                    |       |
| 530-539                    | -      | -                    | 1                  | 532    | 2000                 | -                  | -    | -                    | 1                  | 532   | -                          |                      |       |
| 540-549                    | -      | -                    | 1                  | 540    | 2300                 | -                  | -    | -                    | 1                  | 540   | -                          |                      |       |
| TOTAL                      | -      | -                    | 208                | 450    | 1256                 | 210                | 418  | 1021                 | 418                | 434   | 37.1                       | 1138                 | 317.1 |
| MEAN                       | -      | -                    | -                  | -      | -                    | -                  | -    | -                    | -                  | -     | -                          | -                    | -     |

Table 56. Length composition of commercial whitefish for each seasonal period from Area II, 1984.

| LENGTH<br>INTERVAL<br>(mm) | WINTER |                               |                 | SPRING |                               |                 | FALL |                               |                 | TOTAL |                         |                      |
|----------------------------|--------|-------------------------------|-----------------|--------|-------------------------------|-----------------|------|-------------------------------|-----------------|-------|-------------------------|----------------------|
|                            | NO.    | MEAN<br>FORK DR.<br>LEN. (mm) | MEAN<br>WT. (g) | NO.    | MEAN<br>FORK DR.<br>LEN. (mm) | MEAN<br>WT. (g) | NO.  | MEAN<br>FORK DR.<br>LEN. (mm) | MEAN<br>WT. (g) | NO.   | MEAN<br>FORK LENGTH(mm) | DRESSED<br>WEIGHT(g) |
|                            |        |                               |                 |        |                               |                 |      |                               |                 | MEAN  | SD.                     |                      |
| 310-319                    | -      | -                             | -               | 2      | 314                           | 425             | -    | -                             | -               | 2     | 314                     | 2.8                  |
| 320-329                    | 1      | 324                           | 450             | -      | -                             | -               | -    | -                             | -               | 1     | 324                     | -                    |
| 330-339                    | 3      | 335                           | 483             | 1      | 332                           | 500             | -    | -                             | -               | 4     | 334                     | 3.9                  |
| 340-349                    | 5      | 344                           | 540             | -      | -                             | -               | -    | -                             | -               | 5     | 344                     | 41.8                 |
| 350-359                    | 9      | 354                           | 589             | -      | -                             | -               | 2    | 351                           | 575             | 11    | 353                     | 2.9                  |
| 360-369                    | 3      | 358                           | 633             | 2      | 362                           | 625             | 4    | 363                           | 650             | 9     | 364                     | 3.7                  |
| 370-379                    | 21     | 374                           | 724             | 9      | 375                           | 772             | 6    | 372                           | 692             | 26    | 374                     | 2.8                  |
| 380-389                    | 23     | 384                           | 772             | 9      | 385                           | 789             | 13   | 383                           | 731             | 45    | 384                     | 2.9                  |
| 390-399                    | 25     | 393                           | 776             | 17     | 395                           | 800             | 17   | 393                           | 806             | 59    | 394                     | 3.1                  |
| 400-409                    | 34     | 404                           | 859             | 19     | 404                           | 863             | 28   | 405                           | 893             | 81    | 404                     | 2.8                  |
| 410-419                    | 21     | 414                           | 914             | 16     | 414                           | 916             | 40   | 413                           | 920             | 77    | 414                     | 2.9                  |
| 420-429                    | 20     | 423                           | 953             | 12     | 423                           | 958             | 29   | 423                           | 989             | 60    | 423                     | 2.9                  |
| 430-439                    | 17     | 433                           | 1066            | 18     | 434                           | 1083            | 24   | 433                           | 1015            | 57    | 433                     | 3.0                  |
| 440-449                    | 10     | 442                           | 1125            | 11     | 444                           | 1150            | 20   | 442                           | 1108            | 41    | 443                     | 2.7                  |
| 450-459                    | 12     | 454                           | 1142            | 16     | 454                           | 1194            | 9    | 454                           | 1189            | 37    | 454                     | 2.4                  |
| 460-469                    | 3      | 465                           | 1383            | 22     | 465                           | 1298            | 3    | 463                           | 1283            | 28    | 465                     | 2.6                  |
| 470-479                    | 2      | 474                           | 1375            | 8      | 473                           | 1475            | 4    | 473                           | 1363            | 14    | 473                     | 3.2                  |
| 480-489                    | -      | -                             | -               | 9      | 485                           | 1589            | 6    | 484                           | 1483            | 15    | 484                     | 2.8                  |
| 490-499                    | -      | -                             | -               | 10     | 498                           | 1595            | 3    | 495                           | 1600            | 13    | 498                     | 2.9                  |
| 500-509                    | -      | -                             | -               | 12     | 505                           | 1838            | 2    | 501                           | 1850            | 14    | 504                     | 3.6                  |
| 510-519                    | -      | -                             | -               | 3      | 513                           | 1967            | 1    | 518                           | 1800            | 4     | 514                     | 3.4                  |
| 520-529                    | -      | -                             | -               | 7      | 525                           | 2129            | -    | -                             | -               | 7     | 525                     | 3.1                  |
| 530-539                    | -      | -                             | -               | 1      | 530                           | 1850            | -    | -                             | -               | 1     | 530                     | -                    |
| 540-549                    | -      | -                             | -               | 2      | 544                           | 2400            | -    | -                             | -               | 2     | 544                     | 5.7                  |
| 550-559                    | -      | -                             | -               | 4      | 551                           | 2463            | -    | -                             | -               | 4     | 551                     | 1.0                  |
| 560-569                    | -      | -                             | -               | 1      | 560                           | 2350            | -    | -                             | -               | 1     | 560                     | -                    |
| TOTAL                      | 209    | 403                           | 868             | 209    | 444                           | 1214            | 210  | 420                           | 980             | 628   | 422                     | 40.3                 |
| MEAN                       | -      | -                             | -               | -      | -                             | -               | -    | -                             | -               | 1021  | 342.2                   | -                    |

Table 57. Length composition of commercial whitefish for each seasonal period from Area III, 1984.

| LENGTH<br>INTERVAL<br>(mm) | WINTER |              | SPRING |              | FALL |              | TOTAL       |                    |                              |       |
|----------------------------|--------|--------------|--------|--------------|------|--------------|-------------|--------------------|------------------------------|-------|
|                            | NO.    | MEAN<br>(mm) | NO.    | MEAN<br>(mm) | NO.  | MEAN<br>(mm) | FORK<br>NO. | LENGTH(mm)<br>MEAN | DRESSED<br>WEIGHT(g)<br>MEAN |       |
|                            | NO.    | MEAN<br>(g)  | NO.    | MEAN<br>(g)  | NO.  | MEAN<br>(g)  | NO.         | SD.                | SD.                          |       |
| 320-329                    | -      | -            | 1      | 322          | 450  | -            | -           | -                  | 450                          | -     |
| 340-349                    | -      | -            | 1      | 346          | 650  | -            | -           | -                  | 650                          | -     |
| 350-359                    | -      | -            | 1      | 352          | 550  | -            | -           | -                  | 550                          | -     |
| 360-369                    | -      | -            | 6      | 364          | 642  | -            | -           | -                  | 642                          | 37.6  |
| 370-379                    | -      | -            | 7      | 376          | 757  | 2            | 374         | 775                | 781                          | 60.1  |
| 380-389                    | -      | -            | 12     | 386          | 817  | 8            | 385         | 819                | 818                          | 57.4  |
| 390-399                    | -      | -            | 27     | 395          | 872  | 9            | 395         | 844                | 865                          | 61.9  |
| 400-409                    | -      | -            | 48     | 404          | 916  | 28           | 404         | 927                | 920                          | 65.9  |
| 410-419                    | -      | -            | 33     | 414          | 995  | 49           | 414         | 976                | 984                          | 78.2  |
| 420-429                    | -      | -            | 28     | 423          | 1023 | 34           | 423         | 1035               | 1030                         | 83.2  |
| 430-439                    | -      | -            | 17     | 434          | 1088 | 29           | 433         | 1105               | 1099                         | 98.0  |
| 440-449                    | -      | -            | 11     | 443          | 1150 | 29           | 444         | 1216               | 1198                         | 126.1 |
| 450-459                    | -      | -            | 4      | 454          | 1238 | 7            | 453         | 1286               | 1268                         | 150.5 |
| 460-469                    | -      | -            | 5      | 463          | 1320 | 8            | 464         | 1431               | 1388                         | 102.4 |
| 470-479                    | -      | -            | 2      | 474          | 1425 | 1            | 472         | 1450               | 1433                         | 76.4  |
| 480-489                    | -      | -            | 4      | 485          | 1400 | 2            | 486         | 1600               | 1467                         | 140.2 |
| 490-499                    | -      | -            | -      | -            | -    | 2            | 493         | 1750               | 1750                         | 70.7  |
| 500-509                    | -      | -            | 1      | 502          | 1800 | 2            | 506         | 1975               | 1917                         | 104.1 |
| TOTAL                      | -      | -            | 208    | 413          | 974  | 210          | 425         | 1069               | 418                          | 25.0  |
| MEAN                       | -      | -            |        |              |      |              |             |                    | 419                          | 1022  |
|                            |        |              |        |              |      |              |             |                    |                              | 201.4 |

Table 58. Length composition of commercial whitefish for each seasonal period from Area IV, 1984.

| LENGTH<br>INTERVAL<br>(mm) | WINTER |              | SPRING |              | FALL |              | TOTAL       |                    |                              |       |
|----------------------------|--------|--------------|--------|--------------|------|--------------|-------------|--------------------|------------------------------|-------|
|                            | NO.    | MEAN<br>(mm) | NO.    | MEAN<br>(mm) | NO.  | MEAN<br>(mm) | FORK<br>NO. | LENGTH(mm)<br>MEAN | DRESSED<br>WEIGHT(g)<br>MEAN |       |
|                            | NO.    | MEAN<br>(g)  | NO.    | MEAN<br>(g)  | NO.  | MEAN<br>(g)  | NO.         | SD.                | SD.                          |       |
| 340-349                    | -      | -            | 1      | 346          | 550  | 2            | 343         | 475                | 344                          | 50.0  |
| 350-359                    | -      | -            | 1      | 358          | 650  | 3            | 353         | 567                | 355                          | 75.0  |
| 360-369                    | -      | -            | -      | -            | 11   | 365          | 614         | 365                | 614                          | 39.3  |
| 370-379                    | -      | -            | 6      | 373          | 692  | 15           | 374         | 643                | 374                          | 59.8  |
| 380-389                    | -      | -            | 10     | 384          | 765  | 24           | 384         | 704                | 384                          | 55.3  |
| 390-399                    | -      | -            | 11     | 396          | 827  | 30           | 394         | 758                | 394                          | 777   |
| 400-409                    | -      | -            | 23     | 404          | 880  | 43           | 404         | 806                | 404                          | 65.3  |
| 410-419                    | -      | -            | 32     | 415          | 953  | 25           | 414         | 874                | 414                          | 79.8  |
| 420-429                    | -      | -            | 30     | 424          | 1010 | 20           | 424         | 923                | 424                          | 97.0  |
| 430-439                    | -      | -            | 21     | 434          | 1062 | 18           | 433         | 1028               | 433                          | 1046  |
| 440-449                    | -      | -            | 21     | 444          | 1152 | 6            | 445         | 1113               | 444                          | 83.0  |
| 450-459                    | -      | -            | 14     | 456          | 1207 | 4            | 455         | 1125               | 455                          | 90.7  |
| 460-469                    | -      | -            | 15     | 463          | 1310 | 3            | 463         | 1217               | 463                          | 93.2  |
| 470-479                    | -      | -            | 10     | 475          | 1420 | 2            | 473         | 1300               | 475                          | 124.7 |
| 480-489                    | -      | -            | 6      | 483          | 1558 | -            | -           | -                  | 483                          | 108.7 |
| 490-499                    | -      | -            | 3      | 494          | 1683 | -            | -           | -                  | 494                          | 146.3 |
| 500-509                    | -      | -            | 1      | 509          | 1800 | -            | -           | -                  | 509                          | 317.5 |
| 510-519                    | -      | -            | 1      | 514          | 2150 | 1            | 513         | 1850               | 514                          | 2000  |
| 520-529                    | -      | -            | 1      | 520          | 2050 | -            | -           | -                  | 520                          | 212.1 |
| 530-539                    | -      | -            | 1      | 538          | 2100 | -            | -           | -                  | 538                          | 2080  |
| 550-559                    | -      | -            | 1      | 558          | 1750 | -            | -           | -                  | 558                          | -     |
| TOTAL                      | -      | -            | 209    | 430          | 1075 | 209          | 405         | 831                | 418                          | 953   |
| MEAN                       | -      | -            |        |              |      |              |             |                    | 418                          | 259.6 |

Table 59. Length composition of commercial whitefish for each seasonal period from Area V, 1984.

| LENGTH<br>INTERVAL<br>(mm) | WINTER |     |      | SPRING |      |      | FALL |     |      | TOTAL       |                    |                              |      |       |
|----------------------------|--------|-----|------|--------|------|------|------|-----|------|-------------|--------------------|------------------------------|------|-------|
|                            | MEAN   |     | MEAN | MEAN   |      | MEAN | MEAN |     | MEAN | FORK<br>NO. | LENGTH(mm)<br>MEAN | DRESSED<br>WEIGHT(g)<br>MEAN | SD.  |       |
|                            | FORK   | DR. | LEN. | WT.    | FORK | DR.  | LEN. | WT. | FORK | DR.         | NO.                | SD.                          | SD.  |       |
| 360-369                    | -      | -   | -    | -      | -    | -    | 2    | 369 | 700  | 2           | 369                | 0.7                          | 700  | 0.0   |
| 370-379                    | -      | -   | -    | 1      | 370  | 600  | 4    | 374 | 688  | 5           | 373                | 3.8                          | 670  | 67.1  |
| 380-389                    | -      | -   | -    | 3      | 383  | 650  | 8    | 385 | 719  | 11          | 385                | 2.1                          | 700  | 59.2  |
| 390-399                    | -      | -   | -    | 12     | 395  | 842  | 11   | 395 | 800  | 23          | 395                | 3.2                          | 822  | 73.6  |
| 400-409                    | -      | -   | -    | 22     | 405  | 832  | 19   | 405 | 850  | 41          | 405                | 3.0                          | 840  | 74.3  |
| 410-419                    | -      | -   | -    | 22     | 414  | 886  | 32   | 414 | 902  | 54          | 414                | 3.3                          | 895  | 71.6  |
| 420-429                    | -      | -   | -    | 36     | 425  | 929  | 35   | 424 | 936  | 71          | 424                | 3.0                          | 932  | 86.2  |
| 430-439                    | -      | -   | -    | 20     | 435  | 1040 | 35   | 434 | 989  | 55          | 434                | 3.1                          | 1007 | 91.0  |
| 440-449                    | -      | -   | -    | 27     | 444  | 1054 | 19   | 444 | 1087 | 46          | 444                | 3.3                          | 1067 | 95.0  |
| 450-459                    | -      | -   | -    | 18     | 453  | 1175 | 21   | 454 | 1133 | 39          | 454                | 2.8                          | 1153 | 116.4 |
| 460-469                    | -      | -   | -    | 18     | 464  | 1256 | 13   | 464 | 1181 | 31          | 464                | 2.9                          | 1224 | 118.2 |
| 470-479                    | -      | -   | -    | 7      | 472  | 1307 | 3    | 474 | 1417 | 10          | 473                | 3.1                          | 1340 | 90.7  |
| 480-489                    | -      | -   | -    | 6      | 485  | 1433 | 5    | 484 | 1350 | 11          | 484                | 1.6                          | 1395 | 145.7 |
| 490-499                    | -      | -   | -    | 6      | 495  | 1558 | 3    | 495 | 1483 | 9           | 495                | 2.6                          | 1533 | 167.7 |
| 500-509                    | -      | -   | -    | 2      | 503  | 1450 | -    | -   | -    | 2           | 503                | 3.5                          | 1450 | 70.7  |
| 510-519                    | -      | -   | -    | 3      | 515  | 1683 | -    | -   | -    | 3           | 515                | 1.5                          | 1683 | 28.9  |
| 520-529                    | -      | -   | -    | 3      | 527  | 1917 | -    | -   | -    | 3           | 527                | 2.3                          | 1917 | 284.3 |
| 530-539                    | -      | -   | -    | 1      | 533  | 1800 | -    | -   | -    | 1           | 533                | -                            | 1800 | -     |
| 540-549                    | -      | -   | -    | 1      | 544  | 2850 | -    | -   | -    | 1           | 544                | -                            | 2850 | -     |
| 550-559                    | -      | -   | -    | 1      | 551  | 2650 | -    | -   | -    | 1           | 551                | -                            | 2650 | -     |
| 580-589                    | -      | -   | -    | 1      | 589  | 2850 | -    | -   | -    | 1           | 589                | -                            | 2850 | -     |
| TOTAL<br>MEAN              | -      | -   | -    | 210    | 439  | 1085 | 210  | 428 | 982  | 420         | 434                | 30.7                         | 1034 | 268.6 |

Table 60. Annual mortality rates for commercial whitefish from each administrative area, 1983.

| Area         | Age-Classes Used | Survival (S)  | SE of S       | Var of S      | Annual Mortality Rate (A) |
|--------------|------------------|---------------|---------------|---------------|---------------------------|
| IW           | 11-18            | 0.5974        | 0.0226        | 0.0005        | 0.4026                    |
| IE           | 13-16            | 0.2639        | 0.0366        | 0.0013        | 0.7361                    |
| II           | 10-15            | 0.4743        | 0.0302        | 0.0009        | 0.5257                    |
| III          | 13-15            | 0.2787        | 0.0568        | 0.0032        | 0.7213                    |
| IV           | 14-18            | 0.3556        | 0.0410        | 0.0017        | 0.6444                    |
| V            | 14-21            | 0.5407        | 0.0343        | 0.0012        | 0.4593                    |
| <b>Total</b> | <b>11-21</b>     | <b>0.5973</b> | <b>0.0083</b> | <b>0.0001</b> | <b>0.4027</b>             |

Table 61. Annual mortality rates for commercial whitefish from each administrative area, 1984.

| Area         | Age-Classes Used | Survival (S)  | SE of S       | Var of S      | Annual Mortality Rate (A) |
|--------------|------------------|---------------|---------------|---------------|---------------------------|
| IW           | 11-17            | 0.6178        | 0.0300        | 0.0009        | 0.3822                    |
| IE           | 10-15            | 0.6487        | 0.0267        | 0.0007        | 0.3513                    |
| II           | 10-19            | 0.5199        | 0.0330        | 0.0011        | 0.4802                    |
| III          | 10-17            | 0.6303        | 0.0248        | 0.0006        | 0.3697                    |
| IV           | 10-14            | 0.5202        | 0.0333        | 0.0011        | 0.4798                    |
| V            | 13-17            | 0.5135        | 0.0365        | 0.0013        | 0.4865                    |
| <b>Total</b> | <b>10-19</b>     | <b>0.6426</b> | <b>0.0101</b> | <b>0.0001</b> | <b>0.3574</b>             |

